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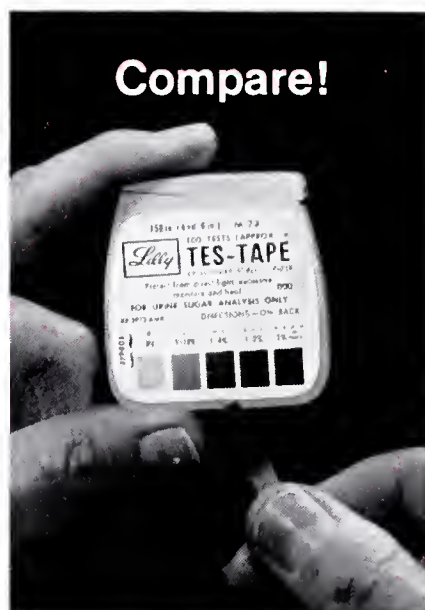
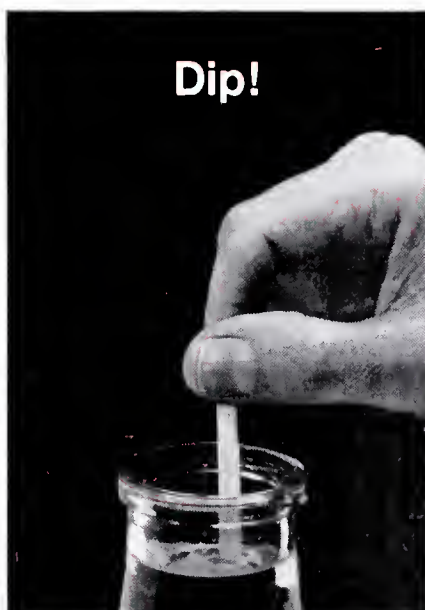
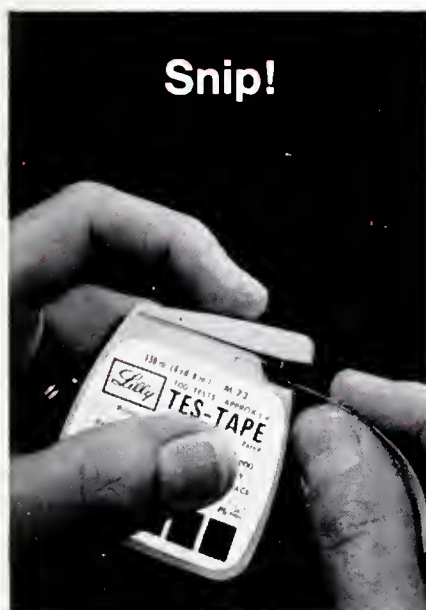
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June, 1971

Vol. 68 No. 1

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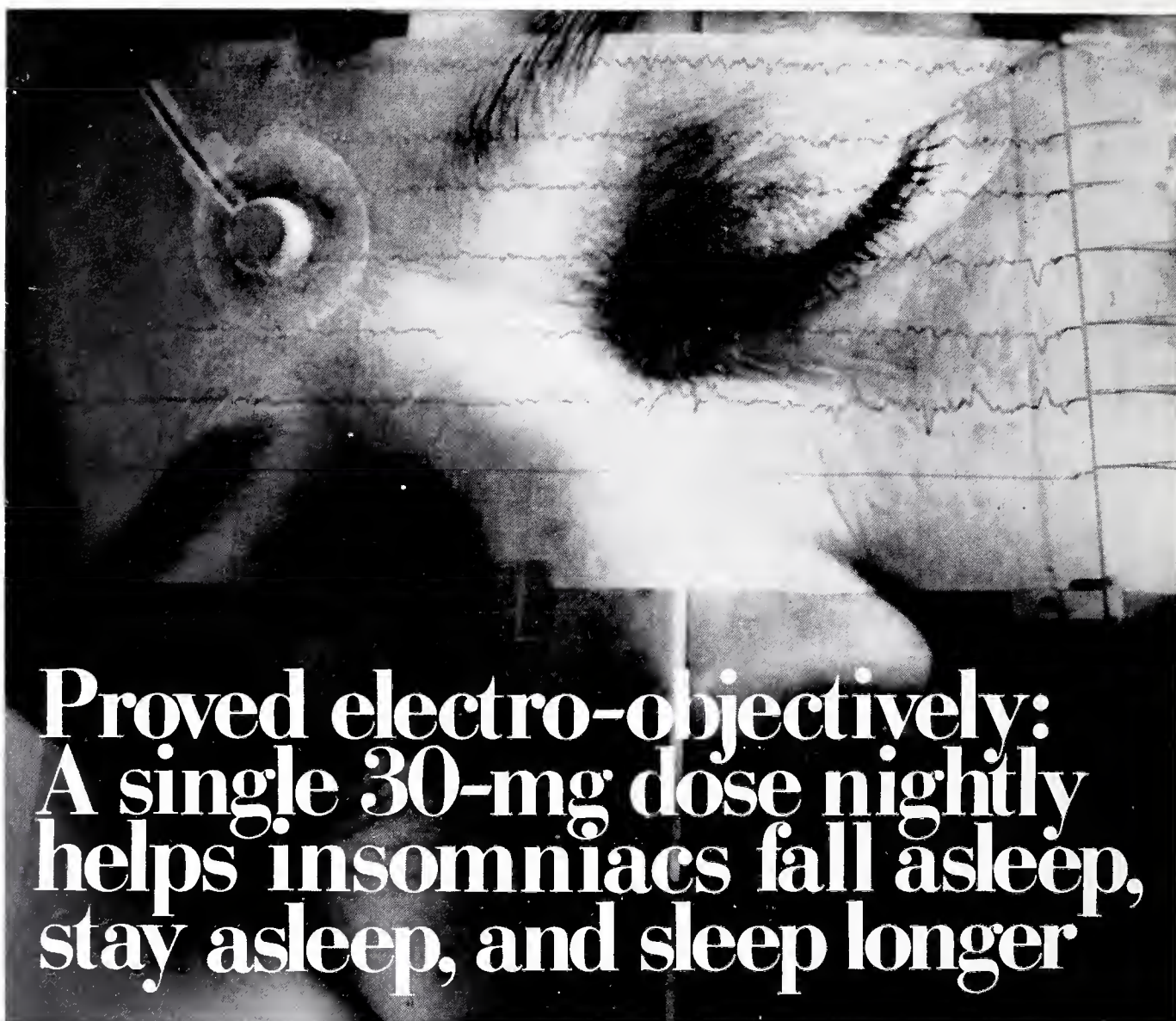
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Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,¹ Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

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Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

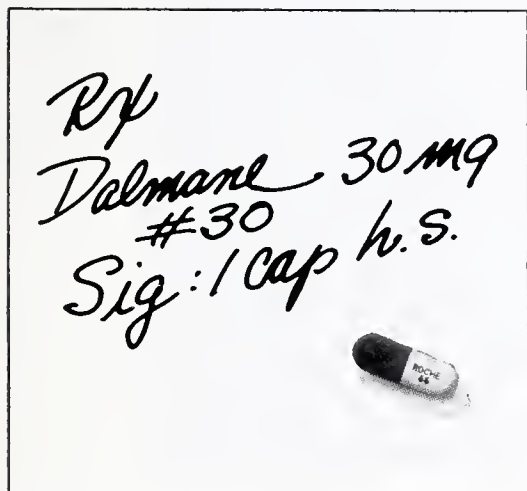
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

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References: 1. Kales, A., et al.: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. 2. Kales, A., et al.: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. 3. Data on file, Medical Department, Hoffmann-La Roche Inc.



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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.



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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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ARKANSAS MEDICAL SOCIETY

1971-72

PRESIDENT'S ADDRESS*

Jack W. Kennedy, M.D.**

Members of the House and guests. I will take just a few minutes to summarize some of the things we have done this year.

I would like to mention a few of the groups with which we have met during the year. There are about thirty-five different groups within the State of Arkansas organized for some type of health delivery system. Many of these are divided into sub-committees throughout the regional areas of the State.

I would like to name a few of these organizations which have been most active and are most responsive for the planning of the delivery of health services within the State.

1. Arkansas Comprehensive Health Planning Committee.
2. The Arkansas State Planning Committee.
3. Arkansas Regional Medical Program.
4. State Health Department.
5. University of Arkansas Agriculture Extension Service.
6. State Pharmaceutical Association.
7. Blue Cross/Blue Shield Plan.
8. Maternal Child Health Program—A Division of State Health Department.
9. Welfare Department.
10. Arkansas State Medical Society.
11. Arkansas State Nurses Association.
12. Arkansas Hospital Association.
13. League of Nursing Association.
14. University of Arkansas Medical Center.
15. O.A.O. and VISTA and other allied programs of the H.E.W.

Most recently, I have conferred — along with other group representatives including R.M.P., C.H.P., Manpower Commission, and University

of Arkansas Medical Center — with officials of MSMHA (Medical Services and Mental Health Administration, Washington, D. C.) in making application and developing plans for a grant to support an organization for an experimental health services delivery system for Arkansas.

It has been my privilege as your president to meet with one of these various committees and organizations on an average of once every week. I have enjoyed visiting and speaking to a large percent of the councilor district societies — and occasionally making more than one visit to a district — during the past year. In doing so, I have traveled some 15,000 miles. Of course, there have been many out-of-state visits as a representative of the State Medical Society. It has been my honor to address and welcome several different organizations—among them the Nurses Association, Licensed Practical Nurses Association, and others.

I have found in traveling about the State, that all of our physicians are dedicated people. There are few exceptions. They are dedicated to the principle of serving the health needs of all the people within their physical capabilities.

There are many reasons that even though the desire is present, it is impossible for the doctors to have contact with all of those who are in need.

In reality, the practicing physician knows that treatment of the sick, prevention of illness, is just the beginning of the needs of the ghettos, the indigent, and the highly populated centers, as well as the remote rural areas and minority groups.

The basic needs, then, are better transportation, the ability and chance to make a decent living, better education, a place to live, and improved sanitary environment. Medicine and

*Delivered to the House of Delegates, Arkansas Medical Society, April 25, 1971.

**4815 West Markham, Little Rock, Arkansas 72201. President, Arkansas Medical Society, 1970-71.

skill alone cannot correct the needs of these people.

With all of the State and Federal planning commissions, they are trying to do the best they know how to identify problems rather than solving them. The members of Congress are attempting to identify health deficiencies, but are at a loss to solve them and find a way to finance overall health insurance.

So as a result of political involvement, the issues of this decade revolve around the overhaul of the health care system. Since there is a theoretical crisis, political wise, every legislator wants in the act. Consequently, there is duplication of legislation, confusion, and a great waste of our finances.

Why not use perhaps a fourth of the money being spent in Vietnam and around the world, to meet the needs at home where there is poverty in a land of plenty. These are social-economic problems which are not being met by our Federal government. Bureaucracy is hung up on health systems crises, and cannot see the forest for the trees.

I would like to briefly discuss some of the goals and areas of concern your Society is considering. I have discussed on various occasions the different legislative programs which, for lack of time, would be unfeasible to go into in detail at this time. One of the first of these goals is:

1. MANPOWER GOALS

The development of more and better manpower during this decade, this is being sought through the recently appointed Manpower Commission. Some of these goals are as follows:

- A. The establishment of several new health education centers through the university system.
- B. Encouraging university health science centers to help coordinate and guide manpower education and to co-operate in developing better systems for the delivery of health care.
- C. Development of the expansion of health education and/or training programs for physician assistants and associates.
- D. Positive efforts to increase admission into medical schools.
- E. Identify the requirements for certification of doctor's assistant and other paramedical personnel.
- F. Initiation of a planning council for the 70's.

2. MANPOWER DEVELOPMENT

- A. To provide access to medical care for those in rural areas and in some of the inter-cities, and to seek grants from the Federal government for a loan to students for the cost of education in health efficiency skills.
- B. These loans would be given if such persons were to deliver their services for a period of time in the area needed.
- C. To attract professionals in the fields of preventive and early disease detection.

UTILIZATION OF H.M.O. SYSTEMS (Health Maintenance Organizations)

This country has the highest standards of health care in the world, despite bureaucratic innuendoes and nit-picking. It is up to us as individual physicians to carry on our jobs and to see that we do the best possible in our various areas. Out of all legislative processes that have been in Congress in the past year, there are 13 more new legislative acts introduced or being scheduled for hearing in various committees. Emerging from this is the H.M.O. organization as above mentioned. I think this is a vital subject for discussion at this time.

Dr. Mark S. Blumberg, corporate planning advisor of the Kaiser Foundation Health Plan says in these words: "There is no correlation between a nation's general level of health care, and the number of doctors per capita." He goes on to say, "I am convinced that, among the developed countries, most of the international differences in infant mortality and life expectancy are not due to health care providers, or health care systems; they are due to radical differences in social-economic standards."

These countries which seem to do better than we are not necessarily wealthier, but they have a more even distribution of their health personnel.

The assumption that more health care services will improve health care is a misdirection of thought.

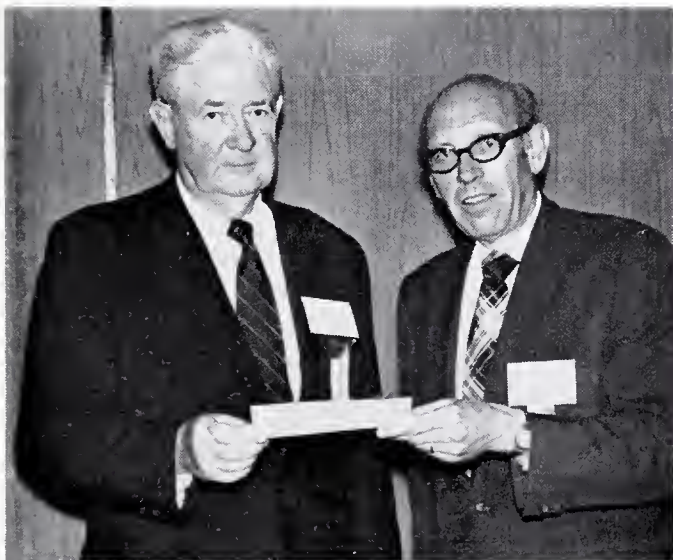
The H.M.O. is considered the umbrella for the delivery systems as proposed at this time in



Jack W. Kennedy makes his President's Address, House of Delegates, April 25, 1971.



John M. Chenault addresses the House of Delegates on A.M.A. efforts to solve the malpractice liability problem.



Robert Watson (left), President of the Board of the Medical Education Foundation for Arkansas, presents \$5,000 check to Dean Winston K. Shorey of the University of Arkansas School of Medicine.



President-elect Stanley Applgate (left) and President Jack Kennedy discuss problems confronting medicine, April 25, 1971.

Congress. As an umbrella, H.M.O. organizations would be composed of Medicare, Medicaid, O.E.O., voluntary health insurance plans, pre-paid and contractual programs to be arranged with each subscribing group. This is an organized system of health care and is one that is capable of bringing together directly or arranging for the services of physicians and other health professionals with the service of in-patient and out-patient facilities for prevention, treating of acute and other health problems, which a defined population might reasonably require.

Under this plan, H.M.O., the providers (doctors) can form corporations under county or local clinics as well as hospitals. Groups are formed in an area for contractual arrangements. Even a county medical society may form a corporation for contractual purposes with H.M.O. This program has two essential attributes. It will bring together a comprehensive range of medical services into a single organization. And secondly, along with this organization, we'll have adequate treatment facilities, sophisticated equipment, and transportation facilities. This can be even for the distant crossroads in rural parts of Arkansas. These services can be provided for a fixed contract fee which is paid in advance by all subscribers. Contracts can also be based on an annual fee or a fee-for-service basis.

Briefly, the H.M.O. component parts are as follows:

1. Based on a voluntary enrolled group of persons in a given geographical area, this group would be reimbursed through a pre-negotiated fixed periodic payment, made by, or on behalf of each person or family unit enrolled in the plan. It is based on:
 - A. Primary care, keystone of the H.M.O. program, which is the prevention of illness, maintenance of good health by providing personal physician care.
 - B. Secondly, it is based upon the agreed services — meaning that the consumer and H.M.O. will agree on which services will be purchased from H.M.O.

What is most important, the H.M.O. organization can be sponsored by either a medical foundation (this is usually organized by physicians), by community groups (and these can be lay or professional people), by labor unions, by governmental units, by profit or non-profit groups



The Incomparable Hildegard sings during her show at the Inaugural Banquet, Tuesday, April 27, 1971.

(which can be allied with an insurance company or other financing institutions), or by any other arrangement.

The H.M.O. organization may be hospital-based, medical-school based, or a free standing out-patient facility, or a group of such facilities. Interested physicians may begin now with planning and establishing an H.M.O. It is hoped that physicians in rural areas will see the need or can see the need for satellite clinics in some of the places with no physicians or health care, and will take advantage of setting up such an organization as has been mentioned above for training and treating people in need.

Your State Medical Society office or one of the co-chairmen of the Manpower Commission, Dr. Henderson or Dr. Parker, can supply you with needed information and addresses of the H.E.W. organization in Dallas where there are trained personnel to help you set up such procedures. Several states have already taken advantage of this and have formed H.M.O. organizations in rural and urban areas.

The time is now — Sunday, April 25 — at this very minute you are beginning the first hour of the rest of your professional life. Help us in our common endeavors and adhere always to the principles of our heritage from the great physicians who have passed before us.

Thank you.

PROFESSIONAL LIABILITY INSURANCE*

Dr. John M. Chenault**

One of the biggest problems that organized medicine faces today is the question of professional liability insurance. I don't like the term "malpractice" for it indicates "bad practice", just as the term "malaria" indicates "bad air", which was once thought to be the origin of the disease. But malpractice is with us; the term is with us; the problem is with us. The question is what is our response going to be?

The best way to begin this discussion is by the definition of the term so that at least we'll know what we're talking about. Malpractice perhaps is best described as a dereliction of professional duty, whether by ignorance or carelessness, which results in negligence in the care of the patient with resulting harm to the patient. The law in most states only requires a physician to provide the level of care to his patient that is usually provided by a physician of like training, under similar circumstances at that time. This may seem a bit vague, but that's all that the law actually requires. There is no requirement that a physician guarantee a result to a patient; and, of course, he must not do so because a guaranteed result would constitute a supplemental contract and would be enforceable at law.

Let us take a look at the scope of the problem of professional liability insurance which faces the physicians of this country. If you go back to 1960, twenty percent of the physicians of this country did not carry professional liability insurance. Today, it is mandatory in many hospitals that physicians carry insurance as a prerequisite to staff membership and anybody who would attempt to practice medicine today without being covered is asking for disaster.

The range of premiums in this country today for the basic coverage of \$100,000-\$300,000 limits is from \$300 annual premium to \$15,000 or \$18,000 annual premium in California for the high-risk specialists; such as anesthesiologists, orthopedists, and neurosurgeons. The average cost claim is up ten to twenty percent each year during the last decade. Ten years ago the claims were less than one claim per one hundred policies written. Today the incidence of claims is fifteen claims in each one hundred policies. The rate increases are up some three hundred to four

hundred percent in the past three years in California alone. This has resulted in the loss of markets, rising costs, and insurance companies refusing to write insurance. The rising number of malpractice law suits which must be investigated and defended, plus the rising amount of damages and awards secured from these claims, plus the rising size of the judgments rendered by juries in the various cases, plus the resultant rising constant settlements in the majority of cases which are not tried, plus the crumbling of legal defenses, have all led to an insurance experience which is so heavily on the loss side as to make such insurance very undesirable business for the most of the insurance carriers.

The roots of the problem lie in the role of consumerism, sensational awards, inflation, governmental meddling, the increasing complexity of medical care, the increasing medical specialization and sub-specialization and, most important, a change in the patient-physician relationships, something of a loss of rapport, something that has been called the de-personalization of medicine.

The law which is applicable to medical malpractice is largely the product of judicial precedents which have been established in court decisions. In recent years, the defense of professional liability litigation has become more difficult because the appellate courts have seen fit to modify or to reverse long established and long standing judicial precedent. The current trend is toward holding the physician liable for unexplainable bad results without adequate proof of his negligence. This, gentlemen, is the background that has caused this very serious problem to arise.

The first of these doctrines which has been modified is the doctrine of "res ipso loquitur," which means "the thing speaks for itself." Now, if you open an abdomen and sew up a sponge or hemostat inside of the belly, this thing literally does speak for itself; or if you're going to amputate an extremity because of gangrene and take off the wrong one, this is an example where the thing would speak for itself. But suppose that you had a badly mangled ankle and a foot with some compound fractures. You have treated this to the best of your ability, you treated it with the usual care that would have been af-

*Presented to the House of Delegates, Arkansas Medical Society, April 25, 1971.

**Member, AMA Board of Trustees, Decatur, Alabama.

forded this patient in this community at that time by a physician of like training, and you wound up with a half a foot. Well, a half a foot's better than no foot at all. It's like the fellow said about halitosis, "Halitosis beats no breath at all." Well, a half a foot is better than no foot at all, and yet the courts have in many instances held that this thing speaks for itself. This is unfair, and this is not proper, and this must be changed.

The next modification which has occurred is the doctrine of discovery. This has contributed to the crumbling of the legal defenses which the profession has enjoyed all these years. The doctrine of discovery has been amended so that this has upset the statute of limitations, because the statute of limitations does not begin to run until the patient is aware of his problem. In other words, if the clamp in the abdomen, which would speak for itself, or some problem which had arisen as a result of negligence, the statute of limitations would not begin to run until the patient becomes aware that he has a clamp inside the abdomen. Under these circumstances, the elapsed time may be six to eight years or more. This means that the insurance company doesn't know and can't know how much it cost them to do business six years before. The doctrine of discovery has been extended to children and infants so that the statute does not begin to run until they have attained their twenty-first birthday. So, in some instances, there have been suits filed as many as twenty or twenty-five years following an alleged incident of malpractice. Well, I can't remember what I was doing five years ago today, much less ten years or twenty-five years and some of my records probably would be lost if I were to start to look for something that happened ten years ago. Certainly, my memory would be hazy, witnesses would be difficult to find, the facts would be difficult to reconstruct. This delay in beginning the statute of limitations has led to the fact that insurance companies are anxious to settle an old claim or recently-filed suit for a claim which is said to have happened some years previously.

This, then, is the doctrine of discovery, and it has greatly broadened the statute of limitations. It is of considerable interest that in California last year a law was passed by their Assembly or their Legislature, which limits the statute of limitations and the doctrine of dis-

covery to a total of not more than four years' time. They have a three-year statute of limitations, but the law pre-supposes that one year from the date of the alleged injury is sufficiently long for the injury to have been discovered and in no event shall the suit be filed after a period of time greater than four years. Now this will help the physicians in California a great deal. This is one thing that perhaps every state society in this country ought to begin to work on.

In this connection, Mr. Speaker, I have with me a booklet which has been prepared by the Office of the General Council of the American Medical Association containing model bills for professional liability legislation. For instance, even though there is no test to determine whether or not the blood to be used in a transfusion could possibly transmit hepatitis, in Illinois the Supreme Court ruled that because the blood was used and the patient developed hepatitis, the hospital and the doctor were guilty. This involves not only the question of hepatitis, transfusion, and transplants, but it also involves the other problems concerning "res ipso loquitur" and the doctrine of discovery. If you would like to have this material and refer it to your insurance committee, you're welcome to it.

Another thing that has caused real trouble in the liability insurance field is the failure of a physician or a surgeon to obtain what is called "informed consent" from his patient before he operates upon him or before he treats him. The courts have held over and over again that an individual patient, provided that he's conscious and rational, is in command and he can decide what is to be done with his own body. Therefore, if the physician does something to him without explaining in some detail (depending upon the circumstances) before he operates upon him or before he treats him, the physician is guilty of negligence. This is malpractice and it is recoverable. When you talk to a patient about a proposed procedure or treatment, level with the patient. It does not mean that somebody who is emotionally disturbed or upset, and who might be made worse by too-detailed disclosure, should have such disclosure. This does not go that far and the courts have not held that. They do hold that you should level with the patient, that you should tell him what you propose to do to him if this carries any great risk with it. He should be informed because it is, after all,

his business to decide what is going to be done with his body.

The next problem that causes trouble in court, of course, is inadequate records. Just one little note in your record that says we suggest or recommend that the patient have this, that, or the next thing, and he refuses, will leave a loophole big enough for a man your size to crawl through the court house door.

The other thing which should be mentioned is the breakdown in the communications between the physician and his patient, the lack of rapport, the lack of communication. You know, there are all sorts of ways of communicating with a patient; you can talk to him, you can smile at him or you could frown, or you could wink, or you might pat her back if you don't pat it too low. You can communicate all sorts of ways with a patient and these little things are the things that will keep you from having to get out of trouble. The records will help you get out of trouble, but adequate communication with the patient will frequently keep you out of trouble. Talking about communications, they are not only verbal, written, a glance, frown or smile, but sometimes there are geographical communications — somebody said "Don't ever get lost in north Georgia, because that's how the population got there to begin with." There's another way of communicating. The story is told that somebody once called Calvin Coolidge in the middle of the night and said, "Mr. President, your Postmaster General just died and, if it's all right with you, I'd like to take his place." Cal thought a minute and then said, "Well, it's all right with me if it's all right with the undertaker." That's like the fellow who was traveling the freeway in Maine and came to the end of the paving where there was a sign to the left which said "Portland" and a sign to the right which said "Portland" and he stopped and asked one of the natives, "Does it matter which road I take to Portland?" The native promptly answered, "Not to me it don't."

What has the AMA done about the problem of professional liability? Some sixteen months ago, a committee on professional liability insurance was appointed. This committee has met with representatives of all the major insurance companies and casualty companies in this country. This committee met with several brokers, trying to decide which was the best route to go,

and here in essence is what we have done. We engaged the services of Marsh-McLennan, an excellent, internationally-known brokerage house. They assured us when we engaged their services that they had an insurance company who would insure a nation-wide program sponsored by the American Medical Association and jointly sponsored on a voluntary basis by the state medical societies who wanted to join. This has been a very, very frustrating experience with this particular company because they have reversed their decision at least four or five times. For the last two months, they have been back in the ball game. They now say that they will provide the market, that they will provide this coverage under certain circumstances.

It's a rather restricted program in some ways. They will not guarantee coverage for a period longer than three years depending on their experience. They will guarantee a premium with an annual increase of not to exceed fifteen percent for the first three years. Here in a nut shell is the way the program would work: The AMA, jointly with the broker and the insurance company and the volunteering state medical society, would enter into an agreement. The AMA would provide all of the help and expertise that it can. The broker will market the program in the state, the state association or society is expected to appoint a committee that would use the information that the society has concerning its individual members. This committee would recommend which physicians should be entitled to insurance at standard rates, they would recommend which physician was entitled to insurance but with a surcharge, and they would recommend which physician was not entitled to any insurance at all. This will put the evaluation in the hands of the state society with the people who know the members best. The state society's committee, also, in the event of a claim, will review the claim, will study the problem, will make recommendations concerning the settlement of the claim, whether or not it is medically justified, whether there really was, in their opinion, negligence, carelessness, whether the claim is compensable. The decision would be left up to the insurance company as to whether it would be settled or whether it would be tried in court.

The state society would be expected, with AMA help and support, to go to the state legislatures and to attempt to get the laws amended.

The points which I have given you, Mr. Speaker, concerning these bills which are model bills can be studied and can be introduced if considered appropriate by the state society. Also, it is expected that the state society, in conjunction with the AMA and with the broker, would conduct patient safety programs. These are nothing more than education programs which are designed to teach your medical and para-medical personnel simple safety tips and things which they can do to prevent occurrences of accidents and injuries that lead to trouble.

In summary, the approach of the insurer and AMA is a professional partnership with the state association using their combined resources

and technical expertise to establish a risk control program to assure long term financial stability, prompt and fair resolution of the claims, identifying and managing sources of loss to set up self-improvement incentives for practitioners, all with active peer involvement.

Gentlemen, my wish for you is that in the event you were to be the defendant in a malpractice suit, you would be blessed with a large number of favorable witnesses, that you would have a sympathetic jury, that you would have excellent records which clearly indicated the disease and the prognosis and the treatment which was rendered, and last but not least, you would need a wonderful defense attorney.



Influence of Preparation and Immunosuppression Upon Longevity of Grafted Aortic Valves

J. L. Sweatt et al (4200 E 9th Ave, Detroit 80220)
Arch Surg 101:658-662 (Dec) 1970

Aortic valves from sheep, pigs, and dogs were transplanted into the descending aortas of dogs. Natural aortic insufficiency was simultaneously induced. In seven groups, the donor valve was placed in a sleeve of donor aorta; in six groups the donor valve was sewn on a segment of Dacron arterial graft. Each group contained 10 to 12 animals. The following groups were studied with and without azathioprine treatment, 4 mg/kg given for eight weeks: sheep valves—fresh, lyophilized and β -propiolactone-treated; pig valves—fresh, lyophilized and β -propiolactone-treated; dog valves—fresh, lyophilized. One hundred seventy-three animals died within a few weeks and one survived for more than one year. Placement of the donor valve in a Dacron sleeve eliminated early death from rupture. Use of azathioprine diminished early clotting of the valves and improved early results, especially heterografts, and also improved long-term results. After two years some cusps were thin and functional, others were thick, contracted, and calcified. Pig valves survived better than sheep valves. β -propiolactone adversely affected both short- and long-term survival of the valve.

Influence of Achlorhydria on Aspirin-Induced Occult Gastrointestinal Blood Loss: Studies in Addisonian Pernicious Anemia

D. J. B. St. John and F. T. McDermott (Baker Research Institute, Prahran, Victoria, Australia)

Brit Med J 2:450-451 (May 23) 1970

The effect of aspirin on occult gastrointestinal blood loss was studied in patients with achlorhydria to test the hypothesis that hydrochloric acid is essential for the occurrence of aspirin-induced bleeding. In 15 patients with treated addisonian pernicious anemia and proved achlorhydria, the mean blood loss was $.036 \pm 0.17$ ml/day before aspirin ingestion, increasing to 2.26 ± 1.42 ml/day of treatment with aspirin; this increase was highly significant ($P < 0.001$). In 15 control patients able to secrete hydrochloric acid, the mean blood loss was 0.53 ± 0.26 ml/day before aspirin and 4.82 ± 2.73 ml/day of treatment with aspirin. While the mean increase in blood loss was greater in the control group, half of the control patients had increases of similar magnitude to those in the achlorhydric patients. Aspirin can cause gastrointestinal blood loss by a mechanism unrelated to hydrochloric acid.

PROCEEDINGS

95th Annual Session

ARKANSAS MEDICAL SOCIETY

Arlington Hotel, Hot Springs

April 25 - 28, 1971

FIRST MEETING HOUSE OF DELEGATES

The first meeting of the House of Delegates convened at 1:10 P.M. on Sunday, April 25, 1971, in Room "C" of the Arlington Hotel Conference Center with Speaker of the House Amail Chudy presiding.

Invocation was by W. Payton Kolb of Pulaski County.

The Executive Vice President, Mr. Schaefer, called the roll of delegates. The following delegates, officers, and members seated as delegates by action of the House were present:

ARKANSAS, R. H. Whitehead, Sr.; ASHLEY, W. A. Regnier; BAXTER, Jack C. Wilson; BENTON, Charles Stinnett; BOONE, Robert Langston; CHICOT, John P. Burge; CLARK, Eli Gary; CLEBURNE, William M. Wells; COLUMBIA, Charles L. Weber; CRAIGHEAD-POINSETT, M. E. Blanton; CRAWFORD, M. C. Edds; DESHA, Guy U. Robinson; DREW, C. Lewis Hyatt; FAULKNER, Charles Archer, Jr.; GARLAND, William R. Mashburn, Thomas E. Burrow, Louis R. McFarland; GREENE-CLAY, A. J. Baker; HEMPSTEAD, Lowell O. Harris; HOT SPRING, Robert H. White; HOWARD-PIKE, M. H. Wilmoth; INDEPENDENCE, Jim E. Lytle; JEFFERSON, Henry A. Crane, Jr., T. E. Townsend; LAWRENCE, J. B. Elders; LEE, E. C. Fields; LOGAN, W. Duane Jones; LONOKE, Fred C. Inman; MILLER, Allie E. Andrews, Jr.; MISSISSIPPI, J. E. Beasley; OUACHITA, A. E. Thorne; POLK, John Wood; POPE-YELL, Roy I. Millard, George E. Malone; PULASKI, F. R. Buchanan, Frank T. Padberg, James L. Smith, Robert Watson, G. Thomas Jansen, Winston K. Shorey, Fred O. Henker, III, Gilbert O. Dean, David H. Newbern; Edgar J. Easley, Bill G. Floyd; Frank M. Westerfield; John McC. Smith; James R. Weber, Curry B. Bradburn, Jr., and Guy R. Farris; SALINE, Donald L. Viner; SEBASTIAN, Carl L. Wil-

liams, Annette V. Landrum, Homer G. Ellis, Neil E. Crow, A. C. Bradford; UNION, George C. Burton; WASHINGTON, Anthony D. DePalma, Robert A. Etherington, Rogers P. Edmondson; WHITE, John E. Bell; COUNCILORS, Eldon Fairley, Bascom P. Raney, Paul Gray, Dwight W. Gray, L. J. Pat Bell, Raymond Irwin, Kenneth R. Duzan, George F. Wynne, Karlton H. Kemp, C. Lynn Harris, Robert F. McCrary, W. Payton Kolb, William S. Orr, Morris Henry, Henry V. Kirby, C. C. Long, and A. S. Koenig; PRESIDENT Jack W. Kennedy, PRESIDENT-ELECT Stanley Applegate; FIRST VICE PRESIDENT Wright Hawkins; SPEAKER Amail Chudy; VICE SPEAKER Charles F. Wilkins, Jr.; SECRETARY Elvin Shuffield; TREASURER Ben Saltzman; and PAST PRESIDENTS C. Lewis Hyatt and L. A. Whittaker.

The chairman of the Credentials Committee, C. Lewis Hyatt, reported that a total of forty-seven delegates had registered and that a quorum was present.

Upon the motion of C. Lewis Hyatt and C. C. Long, the House adopted the minutes of the 94th Annual Session as published in the June 1970 issue of the Journal of the Arkansas Medical Society.

Upon the motion of George F. Wynne and Curry Bradburn, Jr., the House adopted the minutes of the special meeting of the House held in connection with the winter meeting of the Society on November 23rd, 1970, and published in the February 1971 issue of the Journal of the Arkansas Medical Society.

The Speaker introduced the following officers of the Woman's Auxiliary to the Arkansas Medical Society; Mrs. C. Lynn Harris, Hope, president, and Mrs. Harold D. Langston, Little Rock, president-elect. The ladies brought greetings from the Auxiliary.

The immediate past president of the Woman's Auxiliary to the American Medical Association,

Mrs. John M. Chenault, was present and recognized by Speaker Chudy.

Speaker Chudy introduced a member of the Board of Trustees of the American Medical Association, Dr. John M. Chenault of Decatur, Alabama, who addressed the House on the subject "Professional Liability Insurance." (See page 5 of this issue for Dr. Chenault's address.)

Speaker Chudy thanked Dr. Chenault for his presentation and announced to the members of the House that Dr. Chenault would be present for the open hearing of Reference Committee Number Two. Speaker Chudy also announced that Mr. Bill Eldredge, a Little Rock defense attorney, would attend the open hearing of Reference Committee Number Two to answer questions from the membership.

Speaker Chudy then introduced President Jack W. Kennedy for his President's Address. (Please see page 1 for Dr. Kennedy's address.) The House gave Dr. Kennedy a standing ovation.

Vice Speaker Wilkins gave recognition to the secretaries of the county medical societies who submitted the first three annual reports for 1971:

First: Richard C. Petty, Star City, Lincoln County Medical Society.

Second: John H. Delamore, Fordyce, Dallas County Medical Society.

Third: Floyd S. Dozier, Marianna, Lee County Medical Society.

Vice Speaker Wilkins called on the chairman of the Council for a supplemental report covering meetings of the Council held since publication of the annual report in the Journal.

REPORT OF THE COUNCIL

C. C. Long, Chairman

The Council met on Sunday, March 21, 1971 and transacted the following business:

1. *Voted to co-sponsor a series of seminars at various Arkansas colleges and universities to be conducted by the AMA Council on Foods and Nutrition.*
2. *Heard a discussion of and voted to support the AMA's Medcredit Health Insurance Plan.*
3. *Approved the Arkansas Medical Society's Committee on Medicine and Religion having an exhibit booth at the Annual Session.*
4. *Adopted and approved the annual report of audit.*

5. *Authorized the Executive Vice President to purchase certificates of deposit up to the amount of Federal insurance when it seems advisable to him in order to obtain the best interest rate available.*
6. *Adopted a motion commending Mr. Schaefer for his handling of Society funds for maximum interest return.*
7. *Voted to recommend and endorse continuation by Arkansas Regional Medical Program of exploration of an experimental health services planning and delivery system for Arkansas.*
8. *Decided to select two physicians to assist the State Department of Education with its drug abuse educational program. Selected for the positions were Payton Kolb and A. C. Bradford.*
9. *Declined with thanks a Geigy Pharmaceutical Company offer to arrange and underwrite a symposium on malpractice.*
10. *Voted to send a representative to a National Conference on Peer Review to be held in Chicago May 21st and 22nd.*
11. *Reiterated Medical Society support of Senate Bill 421, without amendment, to license osteopaths, and opposition to House Bill 326 supported by the Osteopathic Association.*
12. *Requested the Society legal counsel to write Union County Medical Society regarding their resolutions having to do with medical ethics.*

Speaker Chudy referred the report to Reference Committee No. 3.

Speaker Chudy called for reports from committees.

Lee Parker, chairman of the Committee on Medical Education, submitted a supplemental report consisting of a progress report on the Regional Medical Program's Continuing Education Program. The report was referred to Reference Committee Number One by Speaker Chudy. (See page 18 for the report.)

Elvin Shuffield, chairman of the Committee on Medical Legislation, presented the annual report of his committee. (See page 13 for the report.) This report was also referred to Reference Committee Number One by the Speaker. Speaker Chudy expressed the Society's appreciation to Dr. Shuffield and Mr. Warren

PROCEEDINGS



President-elect Robert Watson (left) and President Stanley Applegate as the Society enters its 96th year.



Pulaski County delegates W. Payton Kolb (left) and James R. Weber (right) escort Robert Watson to the podium after his election as president-elect, House of Delegates. April 25, 1971.



The House of Delegates in session on Sunday, April 25, 1971.

for their work. Dr. Morriss Henry also spoke briefly commending them.

Speaker Chudy announced consideration of old business and called on the chairman of the Constitutional Revisions Committee for presentation of proposed amendments to the Constitution and By-Laws. The following amendments, which were approved at the 1970 Annual Session and subsequently published twice in the Journal, were given final approval by the House.

CONSTITUTIONAL REVISIONS

1. *Amend Chapter VIII, Committees, Section 1 (A) 3 to delete the words "Liaison with public health department". This would serve to eliminate the sub-committee on Liaison with the State Board of Health as recommended at the 1969 Annual Session.*
2. *Amend Chapter I, Membership, Section 7 (Military Members) to read as follows: "Section 7. (A) Regular members of the Arkansas Medical Society who are in the service of the armed forces of the United States, not as career officers, may be classified as military members, and carried on the rolls of their respective county societies as such. Military members shall have a waiver of dues during the time of service, provided that they are in good standing at the time they entered the armed forces. Military members shall enjoy full membership privileges and certificates of membership shall be issued to them for each year.*
Section 7. (B) Young physicians going from internship or residency to military service shall be granted military membership with dues exemption, provided the request for such membership is transmitted through a component society. Such military membership shall be on an annual basis only. The requirement for active membership prior to exemption shall be waived for such military members. Such members shall enjoy full membership privileges except that they may not vote or hold office, and certificates of membership shall be issued to them. This section shall not be construed to mean that military membership may be granted to those physicians who enter military service after a period of active practice during which time they were not members of the Society."

Speaker Chudy called attention of members of the House to the following reports and resolutions which had been received after publication of the March issue of the Journal but prior to the twenty-day deadline for receipt of business items for consideration of the House:

1. Resolution from Miller County Medical Society (Identification of non-medical costs) — Referred to Reference Committee No. 3.
2. Resolution from Pulaski County Medical Society (Membership Directory) — Referred to Reference Committee No. 1.
3. Resolution from Union County Medical Society calling for report of action on 1970 resolution concerning ethics in third party situations — Referred to Reference Committee No. 3.
4. Society legal counsel's letter to president of the Union County Medical Society explaining reason no action seemed appropriate on resolution — Referred to Reference Committee No. 3.
5. Resolution from Union County Medical Society calling for study of Principles of Medical Ethics of AMA — Referred to Reference Committee No. 3.
6. Report of the Medical School Committee — Referred to Reference Committee No. 3.

(Note: For copies of the reports and resolutions, please see pages 30 through 33.)

Speaker Chudy reminded members of the House of the open hearings of the reference committees and urged all members to attend and to participate in the discussion concerning the various reports and resolutions.

Speaker Chudy called on President Kennedy. On behalf of the American Medical Association Education and Research Foundation, President Kennedy presented a check for \$8,454.52 to Winston K. Shorey, Dean of the University of Arkansas School of Medicine, for the use of the school.

Robert Watson, representing the Board of Directors of the Medical Education Foundation for Arkansas, presented to Dean Shorey a check for \$5,000 for the Medical School's student loan fund.

Speaker Chudy announced that meetings of all members in the third and sixth congressional districts would be held immediately following adjournment of the House to select nominees

for district positions on the Arkansas State Board of Health.

Speaker Chudy then announced that the selection of the nominating committee for election of officers for the ensuing year would be made.

Delegates from the various concilor districts held meetings on the floor and selected the nominating committee as follows:

First District: Joe Verser, Harrisburg.

Second District: Jim Lytle, Batesville.

Third District: Fred C. Inman, Jr., Carlisle.

Fourth District: Henry A. Crane, Jr., Pine Bluff.

Fifth District: Kenneth R. Duzan, El Dorado.

Sixth District: A. E. Andrews, Jr., Texarkana.

Seventh District: Donald L. Viner, Benton.

Eighth District: William S. Orr, Jr., Little Rock.

Ninth District: Rogers P. Edmondson, Springdale.

Tenth District: Carl L. Williams, Fort Smith.

The first meeting of the House of Delegates adjourned at 3:05 P.M.

REPORT OF THE COMMITTEE ON MEDICAL LEGISLATION

Elvin Shuffield, M.D., Chairman

Mr. Speaker, Officer, Delegates and
Ladies and Gentlemen:

The Legislative Committee has had one of the bitterest experiences in trying to pass the legislation that this House of Delegates instructed the Committee to pass in the last House of Delegates meeting in December, 1970. In the overall picture, though, I believe we would be rated as having a successful year.

First, I want to thank all of you who served in the Doctor's room and we are very grateful to you for taking time out from your busy schedule to serve in this capacity and I do not believe that the membership of this Society realizes the good work that is achieved by you men who have served.

I am very happy to report that Senate Resolution No. 33 by Senator Howell, entitled, "Expressing appreciation to the various doctors and the nurse who have provided medical services to the members of the 68th General Assembly and to the State Medical Center for providing med-



Robert Watson accepts the position of president-elect of the Society. House of Delegates, April 28, 1971.

ical equipment for the use in the Legislative Infirmary room." I hereby officially present this resolution to Mr. Schaefer to be made part of the records of this Society. Also, I want to thank all of you men who made contact with your respective legislator and acquainted him with our problems. I apologize for so many hurry up notices coming out on the week-end, but unfortunately almost every one of our major problems developed on a Friday about noon. Also, I would like to thank Mr. Schaefer and his staff for getting out these letters on such short notice. Dr. Morriss Henry completed his first session as a freshman Senator and he experienced very frustrating and tiring moments throughout this session and I want to thank him for serving his District and our State in a very honorable fashion.

Our Legislative Attorney, Mr. Eugene Warren, has spent more time than he has ever had to devote to our problems and he has served us very faithfully and had it not been for some of his excellent oratorical abilities, I believe some of our legislation would have been defeated in Committee.

Gentlemen, you can not believe some of the outright falsehoods and misinformation that we encountered during this session. Unfortunately, we did not have 100% support of this Society in some of our problems. On numerous occasions, we thought we had Legislators convinced on how the people would be served best and only to find out Monday morning that we had lost this individual's vote due to the fact that some doctor at home had made some careless statement such as "It would not make much difference what we did" along this line. This House of Delegates must impress on the membership of this State Society that once this body has made a decision, this decision represents this Medical Society and all our membership should give it 100% support. Also, we must urge our members that if they are not knowledgeable of the subject matter and cannot discuss it, try to arrange to get someone in our membership to discuss our problems with the Legislator. Most of these Legislators do not want to be informed just to vote for or against a certain bill, they want to know why they should vote for or against this bill.

I would like to read you a short letter:

"Dear Dr. Shuffield:

At the present time I am not sure who my state representative is and as I understand there is not much time to find out. I am entirely against Senate Bill No. 377 by Alagood and would appreciate your informing my representative of this fact. Encourage him to vote against this bill."

It is hard to believe that this letter came from a member of this Society. You can readily see that even though this man's intentions are good, this letter did not help. There were three Representatives and two Senators from this man's area, all of whom would more readily believe what that doctor would tell them rather than what I had already told them. The point is that direct contact by membership in this Society with their respective Legislators would do far more good than all our efforts in Little Rock.

On the osteopathic legislation, House Bill 326, we had to beat it three times within two days and it still has not passed, but a recent editorial in the Gazette stated that this bill passed. Our original Senate Bill 180, re-written to change one date from March, 1970 to July, 1970 to admit the few osteopaths, who took the examination between those dates was passed and Governor Bumpers put three amendments on this bill which materially did not alter our primary proposed legislation. Also, the Gazette would have led the public to believe that the doctors were against taking osteopaths, when it is a matter of public record before the Legislative Council that we were agreeable to take these people provided they were well qualified and were supervised by the Arkansas State Medical Board and passed the Arkansas State Medical Board examination. It is extremely important that we try to convince Arkansas that the doctors of Arkansas are not against qualified osteopaths. Also, the lack of doctors in Arkansas is due to socio economic factors, not the doctors.

In all probability before the next General Assembly convenes, there will be a reapportionment of the House and Senate on a one man, one district area. This would call for one Representative for each 19,000 population and one Senator for each 55,000 population. How this can be fitted into districts and counties is an



The Executive Committee of the Society for 1971-72. From left: C. C. Long, Chairman of the Council; Robert Watson, President-elect; Stanley Applegate, President; Elvin Shuffield, Secretary.



Breakfast meeting of the Council, Monday, April 26, 1971. The Council meets daily during the Annual Session and considers many problems.

unsolvable problem, in my opinion. Therefore, I am inclined to think that we will see that a different arrangement of matching Representative Districts and Senatorial Districts.

Let me urge you gentlemen to take close observation and information of these houses, and to work to get our friends elected. Also, I would like to urge each of you to evaluate the man in your district, because we have several districts of which are in great trouble, as I do not think these men show the best interest of the public health of the citizens of this state. I would like to make the following recommendations:

1. That a committee be appointed to thoroughly study our political problems to the Legislature. I would like to determine whether it is a generation gap or just a lack of communication.

2. I would like to recommend to our Society that our doctors take a more active part in campaigning and contributions to our candidates who would serve to the best interest of our State. We have been told on several occasions that if our doctors had been more active in campaigns, the telegrams and letters that were sent during the session of the Legislature would not have been necessary.

3. Request that our doctors evaluate, keep up with and be more knowledgeable of our problems that relate to the best interest of our patients' health and political problems.

4. That the membership of this Society make every effort possible to speak before civic clubs and other gatherings in this State to let the people know how inferior and inadequate chiropractic treatment is.

5. That a Special telephone committee be organized in councilor districts whereby there will be one chairman in each councilor district with whatever number of sub-chairmen and members necessary to cover a councilor district to disseminate hurry up telephone information when necessary.

6. Request that the Constitution Committee study and evaluate the feasibility of returning to a junior and senior councilor from each district.

Gentlemen, let me urge you to give this report your serious consideration because there has been considerable change to take place in legislation in the last few years and apparently more changes are going to transpire. These problems have grown to such magnitude that two of us just simply cannot handle the situation. I have not discussed this statement with Mr. Warren, but I think I can make an observation that we simply cannot afford to be out of our offices as much as we have been during this session and it is up to this body to try to improve our relationships, committee functions and political activities in order that we can achieve our legislative programs with less effort.

The following acts or legislative actions will be of interest to most of you. Act 10 permits minors, 18 or over, to donate to blood banks without parents' consent. Act 53 permits physician trained assistants. Act 54 permits licensing nurse anesthetists to bill government agencies. Act 51 authorizes the tuberculosis sanatorium to admit indigent patients suffering from chronic chest disease. Act 462 limits the legal liability arising from medical transplants and transfusions. Gentlemen, let me add that this does not exempt us from negligence, but does help us in the event of hepatitis.

Act 133 amends the Rural Medical Practice Student Loan and Scholarship Act. Act 306 amends Section 75-1045 (C) (2); provides doctors, nurses, hospitals withdrawing blood for police blood alcohol analysis not liable. Act 178 permits the licensing of certain foreign graduates. Act 432 regulates the practice of nursing; provides for State Board of Nursing with registered nurse, licensed practical nurse and licensed psychiatric nurse technicians. This was the so-called compromise bill involving all three of these nursing professions. We did not enter into this debate. Act 433 revises and codifies laws relating to State Hospital, mental health and mentally ill persons. Act 472 amends Sections 72-610 to provide for temporary permit to practice medicine under supervision of a licensed physician. This particular act was designed to try to get one individual to practice medicine in Foreman, Arkansas. Act 34 authorizes reimbursement for services rendered under health and accident policy by anyone licensed by any examining board under Services Act.

This was the chiropractor bill to begin with which breezed through the House without us even having a chance to discuss it before committee and in the Senate, we were successful in getting it amended in such a fashion that we do not believe these people can use this for their personal gain. Act 202 gives subpoena power to licensing and disciplining boards of professions of the healing arts. Act 314 appropriates \$200,000 annually in biennium from general services fund to account for State Kidney Disease Commission, and Act 450, a companion bill, creates State Kidney Disease Commission. Act 457 amends Section 84-2016 (A) (1) to permit income tax deductions for contributions for self-employment plans. Act 354 provides all business and professional corporations with fewer than 5 shareholders shall receive same state income tax treatment as under federal code. Act 650 provides for licensing of certain osteopathic physicians by the State Medical Board, abolishes osteopathic examiners board. Gentlemen, this is our bill with three of Governor Bumpers' amendments added to the bill and for all practical purposes I believe we have obtained what this House of Delegates wished us to do.

A chiropractor bill was passed by both Houses with our amendments on this bill and it is a little hard to understand why they accepted these amendments rather than drawing down their bill, because I believe they have less privileges now than what they previously had. They will no longer be able to advertise. Mr. Warren may want to add some discussion to this measure.

We carried out the wishes of the Traffic Safety Committee on trying to create a medical advisory board and to tighten up on unqualified drivers being on the highway and we were getting favorable reaction, but the authors of these bills were asked to withdraw them for reconsideration at a later date.

We assisted the pharmacists in tightening up some of their regulations, particularly that of out of state firms shipping drugs into this state.

The laboratory technicians did not seem to like the bill that Mr. Warren presented to them and they drafted another bill of their own which was somewhat ambiguous and seemed to have



One of Stanley Applegate's first actions as president was to present out-going President Jack Kennedy a plaque expressing the Society appreciation for his service to the Society and to the public during his term of office.

some contradictory sections in this bill and this bill did not pass.

Also, we were surprised to see a bill presented for licensing of psychotherapists, so Mr. Warren, Dr. Payton Kolb and myself met with them early one morning and much to our surprise, we learned that it was social welfare workers wanting to be licensed, so after considerable discussion, these folks agreed to withdraw their legislation at this time and to draft it for licensing of a social welfare worker rather than licensing of psychotherapists.

The optometrists introduced a bill which required that state employees could not distinguish between an ophthalmologist and optometrist in referring patients and this bill was vetoed by the Governor.

Gentlemen, I could spend hours discussing the trials and tribulations of this legislative session and if any of you men want to discuss any of this legislation with me, I would be happy to do so. Also, again, I urge you to study and analyze your local Senator's and Representative's stand on some of these issues.

**ARKANSAS LEGISLATURE
1971 REGULAR SESSION**

**S. R. No. 23
(Howell)**

EXPRESSING Appreciation to the Various Doctors and the Nurse Who Have Provided Medical Services for the Members of the Sixty-Eighth General Assembly, and to the State Medical Center for Providing Medical Equipment for the Use of the Legislative Infirmary Room.

WHEREAS, the Arkansas Medical Society has cooperated by making available to the House of Representatives and the Senate of the Sixty-Eighth General Assembly the services of various doctors from throughout the State to minister to the medical needs of the members of the General Assembly; and

WHEREAS, various doctors from throughout the State have contributed one or more days of their valuable time in attending the General Assembly to render medical services; and

WHEREAS, Mrs. Paul Means, Registered Nurse, has served as the nurse for the General Assembly and has rendered invaluable and courteous assistance to the various doctors and the members of the General Assembly; and

WHEREAS, the services rendered by the various doctors from throughout the State and by Mrs. Paul Means, Registered Nurse, on full-time duty while the General Assembly has been in session, have been of immeasurable assistance to the members of the General Assembly while they have been away from their homes and regular doctors while serving in the General Assembly; and

WHEREAS, the State Medical Center has cooperated with the General Assembly by providing medical equipment for the Legislative Infirmary Room;

NOW THEREFORE,

Be It Resolved by the Senate of the Sixty-Eighth General Assembly of the State of Arkansas:

That the Senate hereby expresses appreciation of all members of the Sixty-Eighth General Assembly to the Arkansas Medical Society, to the various doctors from throughout the State, and to Mrs. Paul Means, the nurse of the Sixty-Eighth General Assembly, all of whom have unselfishly devoted their time and services which have been of invaluable aid to the members of

the General Assembly while attending the 1971 Regular Session.

BE IT FURTHER RESOLVED that the Senate hereby expresses appreciation to the State Medical Center for furnishing medical equipment used in the Legislative Infirmary Room in the State Capitol Building during the 1971 Regular Session.

**SUPPLEMENTAL REPORT
COMMITTEE ON MEDICAL EDUCATION**

L. B. Parker, M.D., Chairman

**WORKING DRAFT—PROJECT NO. 25
CONTINUING EDUCATION PROGRAM
FOR PHYSICIANS**

I would like to preface this report to say that I am prejudiced in favor of this project. Not so much because I have been directing it since December, 1970, but because I have served some years in the Medical Education Committees of both the Arkansas State Medical Society and the Arkansas State Academy of General Practice, and know the needs. I have served on the long range planning committee of the State Medical Society whose purpose was to cooperate with the University of Arkansas Medical Center in establishing goals and programs for physicians and patients in the State. I was a member of the Regional Advisory Group when this project was developed and presented. I feel that the potential for this project is extremely good; and I hope that we can come close to realizing most of this potential.

My association with the project began December 1, 1970, and was started out by conferring with Dean Shorey and Dr. Juniper, the associate director. At this conference, we considered several matters of major importance. These included:

1. the area to be involved (4th Councilor District)
2. the various means of educational instruction which we felt could be offered
3. projected expenditures
4. possible faculty or consultants.

The following possibilities of instruction were considered:

1. **AUDIOVISUALS:** (a) Audiscan and Didactor-type units—because these were most familiar to our audiovisual director, were not excessively expensive, and are easily adapted from

PROCEEDINGS



The head table at the Inaugural Banquet. From the left: Robert Watson; Mrs. Watson; C. C. Long, Chairman of the Council; Mrs. Applegate; Stanley Applegate, President-elect; Jack W. Kennedy, President; Mrs. Kennedy; Mrs. Shuffield; Elvin Shuffield, Secretary; Mrs. Shorey; and Winston K. Shorey, Chairman of the Convention Committee.



Jack W. Kennedy administers oath of office of president of the Arkansas Medical Society to Stanley Applegate.

the usual lecture, slide type presentation given by most instructors in formal lectures. We feel that these type programs must be limited to 15 minutes or less in order to attract the use by the busy practitioner. (b) Dial Access telephone system similar to the Wisconsin program. (c) Audio Digest Tapes. (d) Cooperation with University of Missouri in their telelecture series.

II. *SPEAKERS*—for hospital staff meetings, county medical society meetings, and regional seminars.

III. *CONSULTANTS*—specialists in various fields to be provided in the local community hospitals for teaching programs with the local physicians. It was suggested that these consultants could be utilized to:

- a. make hospital rounds
- b. see selected outpatients
- c. discuss certain patients' records
- d. have general medical discussions with the staff.

These consultants would come on a scheduled basis. It was also suggested that in certain urgent and unusual situations, consultants could be provided on an on-call basis.

Following this initial conference, I personally contacted the chief of staff and hospital administrator, and many of the staff physicians of each community hospital in the proposed area by letter, by telephone, and by driving to each community and discussing the program. These discussions were to find out:

1. Were the hospitals and physicians interested in participating?
2. Which parts of the proposed program were they interested in?
3. How often and on what days and times would they prefer to have their programs.

The answers received were:

1. All hospitals and their medical staffs desired to participate in some degree or another.
2. All were interested in having the audio-visual units.
3. The Dial Access we planned to install on a statewide basis anyway.
4. The tapes and telelecture portions were dropped.
5. Pine Bluff, the one metropolitan area, was interested in having regional seminars only.

6. The smaller communities were interested in the consultant part of the program.

Following these meetings, we proceeded to set up the following program:

- a. Audiovisuals for each community hospital
- b. Regional seminars—to be held in Pine Bluff, but open to any physician wanting to attend. The topics to be covered were selected by their local program committee, Dr. Joe Robinette, chairman.
- c. Visiting consultant program—set up for the six smaller community hospitals in Dumas, McGehee, Dermott, Lake Village, Monticello, and Crossett.

We then notified each hospital administrator, the Chief of Staff of each hospital and every physician (not just in the town with the hospital) in the district of the details of the final proposed program and the schedule of the consultant visits. This enables a doctor or consultant in Dermott, for example, to drive to a nearby town on the schedule to obtain or give consultation, if needed.

Consultation was held with the State RMP office to discuss the final proposed program and its goals, objectives, methods, and evaluation. See attachment No. 1. Evaluation forms were devised, submitted and approved for use. See attachment No. 2.

Consultation was held with the State Medical Society through the chairman of the Medical Education Committee (who is also this project's director), the chairman of the Subcommittee on Postgraduate Education (Dr. Wynne), and the chairman of the Council of the Arkansas Medical Society (Dr. Long). Information copies of correspondence have also been sent to the President of the State Medical Society (Dr. Kennedy) and the Executive Vice President (Mr. Shaefer). A display was made for the RMP exhibit at the annual meeting of the Arkansas Medical Society in April 1971.

Progress has been made as follows: The Dial Access system was completed, installed, and is now operational. See attachment No. 3. 262 calls have been received from February 9 through March 31. 30 Evaluation Cards were returned, and of these, 72 reported that the calls made were "useful" to their practices. On the 8 calls reported "not useful", personal contact was made with the caller in order to decide what change if any was required in the tape specified.



The Council of the Arkansas Medical Society, 1971-72. Reading from left to right, front row, Elvin Shuffield, Secretary; C. C. Long, Chairman of the Council; Councilors Paul Gray and Dwight W. Gray, President Stanley Applegate; President-elect Robert Watson; Councilors Kenneth R. Duzan, William S. Orr; Speaker Anail Chudy; Councilor A. S. Koenig; back row, left to right, Vice Speaker Charles F. Wilkins, Jr.; Councilors Karlton Kemp, L. J. Pat Bell, George F. Wynne, Eldon Fairley, Bascom P. Ramey; Treasurer Ben N. Saltzman; Councilors Lynn Harris, Robert F. McGraw, James Bethel, and Morris Henry. Not present were: First Vice President Winston K. Shorey; Councilors Hugh R. Edwards, Wayne Lazenby, C.

Programmed instruction units for the Audiscan and Didactor Units have been delayed since the audiovisual director spent 100% of his time in rushing the Dial Access system into use. We contacted or tried to contact other areas about audiovisual programs which we might use in our program. I have been extremely disappointed in the response. We have been discouraged by "this is not adaptable for your use," or "you can't make any changes in this" to fit our situation. A few tentative units were promised at a cost of \$25.00 and up. My audiovisual director (Dr. Juniper) informs me that copies of most programs of this sort cost about \$10-\$15 each to produce after the master is made.

As a result of my limited experience to date, I would like to suggest that National R.M.P. should make some attempt at compiling a catalog of all audiovisual materials developed and/or available by the local RMP projects. And to allow local projects to purchase such materials at a reasonable cost and to edit or modify the materials to fit their own local needs.

It is hoped that we will produce 20 master programs with copies to be made available to each of the participating hospitals and any other interested groups.

SEMINARS — Plans for three seminars in Pine Bluff were begun and contact has been started for a fourth seminar.

- a. 16 March, 1971 — A seminar of heart disease was held with speakers provided by the University of Arkansas Medical Center. 35 physicians attended.
- b. 15 June, 1971 — A program on Trauma as seen in the Emergency Room will be presented by a faculty from Barnes Hospital in St. Louis.
- c. 21 Sept., 1971 — We have asked Ochsner Clinic to present a program on gastrointestinal problems. No response as of April 1.
- d. 16 Nov., 1971 — A program on Cancer Therapy will be presented by faculty from M. D. Anderson Hospital, Houston.
- e. One seminar will be presented on 29 May, 1971, in Fayetteville on Fluid and Electrolyte Problems, by a private pediatrician and faculty members from UAMC and Southwestern Medical School in Dallas.

CONSULTANTS — The consultant program was begun on January 5 and as previously stated, the frequency, the day, and the time were selected

by the local physicians. Their request was for only internists at the start; but we are now receiving requests for other specialties and these will be filled as requested. See Attachment No. 4. Some of the problems covered include: Management of Chronic Renal Failure, Myocardial Infarction, Post Infarction Syndrome, Thyroiditis and Thyroid Function Test, Diabetes Mellitus and Insulin Secretion, Rheumatoid Arthritis, Gout, Obesity, Endocrine Problems, and Patients with Hypoglycemia.

Evaluation meetings have been held in February and April with all members of the consulting staff to critique the program.

The project director, since the program began, has personally driven to each community involved in the consultant program to talk with various local physicians about the program — whether or not they were satisfied, any changes desired, or suggestions to be made. The mechanics of operation have become smoother with time and consultation. To date, all communities are satisfied and want to continue the program as presently set up.

The program has been expanded into other areas of the state. Two communities in District Three (Helena and Stuttgart) are working into the program by having speakers for scientific programs for their local county society and hospital staff meetings. We have contacted other communities in this district but have not received any response, and have not pushed hard in this district since learning that the Memphis program has been active in the district already.

We have begun establishment of the program in District 9 as follows:

Mountain Home — consultants once monthly.

Harrison — consultant and speaker combined once a month.

Benton County — speaker once monthly.

Washington County — speaker on call (6 times a year).

Siloam Springs — consultant once monthly.

Fayetteville — consultant once monthly.

Ozark — to begin shortly.

Other contacts have been made with the following communities about joining the program: Osceola, Brinkley, Morrilton, Heber Springs, Clarksville, Malvern, Arkadelphia, Hope, and Fordyce. Warren is to begin having consultant visits once monthly in April.



President Jack W. Kennedy acts as master of ceremonies for the banquet on Tuesday, April 27, 1971.



Hildegard pleased the crowd with her show.



Harold D. Langston accepted trophy for second place in the golf tournament. President Kennedy makes presentation.



Karlton Kemp offers assistance to Hildegard when she has trouble with microphone.



Dr. and Mrs. Robert Watson at head table at banquet on Tuesday, April 27, 1971.



Karlton Kemp holds microphone for Hildegard when public address system fails during her performance at banquet. Tuesday, April 27, 1971.

It is felt that in the four months of operation to date (December 1, 1970 - March 31, 1971) a lot of activity has taken place and that the program has "gotten off the ground."

It is also felt that further expansion of the program will require additional funding for (1) personnel to administer the program (especially someone to directly assist the director in contacting new areas for the program and in contacting the local physicians already involved to coordinate even more closely their wants and needs with what we try to provide.) (2) additional travel expenses (3) additional consultant and speaker services — we have tended to stress the consultant teaching services more than speaker services since there seems to be a national trend away from formal lectures. Also it seemed to us that the consultant — rounding — discussion type programs more nearly approximate one of the major teaching tools used in most teaching hospitals in training their students and residents. (4) audiovisuals will be developed to the point of providing at least one new program per month.

It is felt that we are meeting our objectives as follows:

1. Providing audiovisual materials by acquisition and local development.
2. The Dial Access system is operational now.
3. We are providing dialog with experts through our speakers and seminars.
4. We are providing regularly scheduled visits from consultants to local hospitals and the local physician.
5. We have offered on-call consultation visits (but to date no one has availed himself of this service).

We are attempting to evaluate our program by obtaining reports from consultants and participating physicians and making changes as necessary (almost none required so far).

We feel after reading these reports that overall the consultants feel that the program is progressing satisfactorily. The local physicians have also tended to be enthusiastic in most of their written comments and in their personal comments to the director.

One of the community hospitals, since participating in our program, has begun making plans for the modification and establishment in their hospital of coronary care facilities.

We try to be adaptable in situations where our

program can be of direct assistance to other medical projects and programs. For example, our project is assisting in providing better facilities for teaching the coronary care courses for physicians and nurses.

We have offered to assist the Medical Careers project in providing audiovisual equipment and programs for presentation in various high schools.

We are cooperating with a proposed pediatric tumor consultant project by funding a "trial run" of three visits in Pine Bluff. This is being worked out through the proposed director of that project (Dr. Berry) and the local physicians in Pine Bluff.

We have offered to assist in the proposed Experimental Health Care Delivery System in Arkansas in any way in which educational programs might be useful — both audiovisuals for doctors, other professionals, and patients and for consultants as might be desired.

Attachment No. 1 **CONTINUING EDUCATION** **FOR PHYSICIANS**

GOAL

Improve local MD capability for delivery of good medical care.

OVERALL DEVELOPMENT

Continuing Education Program

1. Obtaining what is now available.
2. Developing their own.

I. Audio Visual

II. Dial Access

III. Speakers

IV. Circuit Riders

V. Emergency Consultation

OBJECTIVES

I. To provide readily accessible Continuing Education materials to physicians in the project area.

A. Audio Visual

1. Acquisition of materials
2. Distribution of materials

B. Dial Access Tape System

1. Acquisition of materials
2. Distribution of materials

II. To provide prearranged dialogue with experts

III. To provide regularly scheduled hospital oriented visits from faculty on preplanned subject areas based on local interest.

- IV. To provide on-call teaching consultation visits open to all local MDs.

METHODOLOGY

- I. A. Materials
 1. Obtain currently available and supportive materials
 2. Develop materials not available
- B. Develop agreements and system for distribution above.
- II. A. Regularly scheduled meetings
 1. Medical Society and UAMC as faculty
- B. Special seminars upon request
 1. Out of state speakers
- III. Medical rounds type sessions

Case oriented with advanced scheduling
- IV. Upon request teaching consultation at site open to all local MDs.

EVALUATION

- I. A. Development of materials
 1. (a-b) Display of materials

2. (a-b) Faculty evaluation
 - B. Distribution
 1. Audio Visual
 - a. fulfillment of agreements
 - b. measures of utilization
 - 1.) frequency of use
 - 2.) Census
 - 3.) Consumer evaluation
 2. Dial Access
 - 1.) Census
 - 2.) Followup consumer response
 - II. A. Requests by subject, area and ability to meet requests
 - B. Census by presentation
 - C. Followup consumer evaluation
 - D. Faculty evaluation
 - III. Same as II above.
 - IV. Same as II above.
- Subjects covered:
Doctors present:
Comments:



Members of the Fifty Year Club were honored by the Society at a breakfast on Tuesday, April 27, 1971. G Allen Robinson (center of head table) was president of the club for 1970-71. Dr. James L. Dennis (to right of Dr. Robinson) spoke at the breakfast.

PROCEEDINGS
Attachment No. 2
CONSULTANTS' REPORT

Date & Site Visited: _____

Physicians Present: _____

Subjects Covered: _____

Your Evaluation:

A. Doctors interested? _____

B. Participation? _____

C. Discussions worthwhile? _____

Comments: _____

EVALUATION BY PHYSICIANS
For Consultant Visits

Consultant's Name: _____

Subjects Discussed: _____

I found the discussion: (Circle appropriate number)

1. OF NO BENEFIT TO ME:

- a. too elementary
- b. too complex
- c. not related to my practice

2. HELPFUL TO MY PRACTICE:

- a. helped my confidence
- b. a help in reviewing my approach
- c. got new ideas
- d. will change my approach

Comments: _____

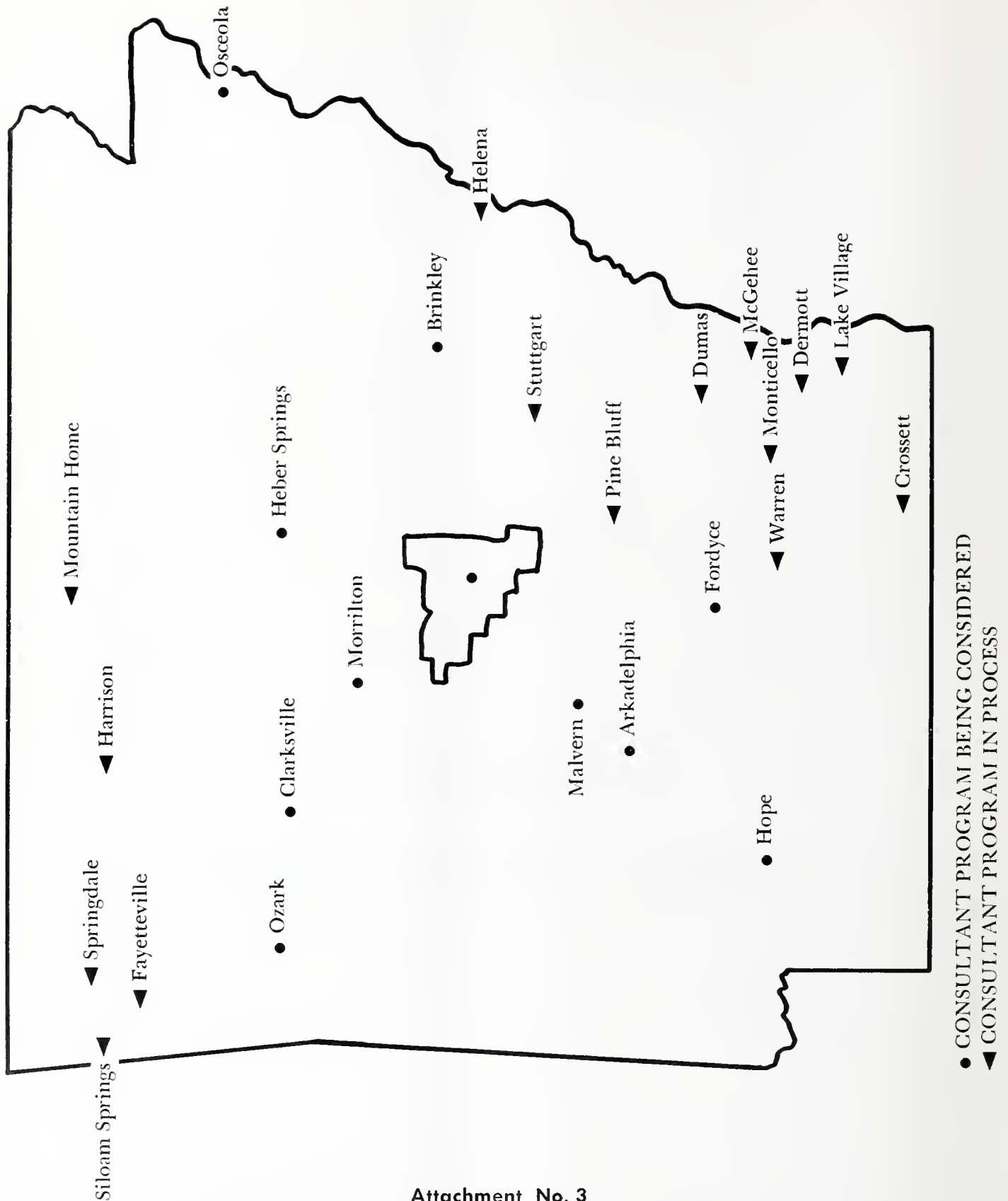
**CONTINUING EDUCATION PROGRAM FOR PHYSICIANS
TEACHING SESSIONS CONDUCTED IN JANUARY, FEBRUARY, MARCH**

<i>Date</i>	<i>Faculty Member</i>	<i>Morning</i>	<i>Afternoon</i>	<i>Night</i>	<i>Transportation</i>
Tue 1/5	Dr. Jas. Taylor	Dumas	Monticello	----	Auto
Fri 1/8	Dr. Jas. Doherty	Dermott	Crossett	----	Charter
Wed 1/13	Dr. Robt. Abernathy	Lake Village	McGehee	----	Auto
Tue 1/19	Dr. Joe Bates	----	Monticello	----	Auto
Fri 1/22	Dr. Jas. Taylor	Dermott	Crossett	----	Auto
Wed 1/27	Dr. Marvin Murphy	----	----	----	----
Tue 2/2	Dr. Jack Davis	Dumas	Monticello	----	Auto
Fri 2/5	Dr. Geo. Ackerman	Dermott	Crossett	----	Auto
Wed 2/10	Dr. Jas. Taylor	Lake Village	McGehee	----	Auto
Tue 2/16	Dr. Robt. Bulloch	----	Monticello	----	Auto
Fri 2/19	Dr. Jas. Taylor	Dermott	Crossett	----	Auto
Wed 2/24	Dr. Jas. Taylor	----	McGehee	----	Auto
Tue 3/2	Dr. Jas. Doherty	Dumas	Monticello	----	Charter
Fri 3/5	Dr. Pat Flanigan	Dermott	Crossett	----	Auto
Wed 3/10	Dr. Jas. Taylor	Lake Village	McGehee	----	Auto
Tue 3/16	Dr. Marvin Murphy	----	Monticello	----	Auto
Tue 3/16	Pierce, Jenkins, Bulloch	----	----	Pine Bluff	Auto
Wed 3/17	Dr. Louis Sanders	Mountain Home	----	----	Charter
Fri 3/19	Dr. Joe Bates	Dermott	Crossett	----	Auto
Wed 3/24	Dr. Robt. Bulloch	Cancelled	Cancelled	----	Auto



**CONTINUING EDUCATION PROGRAM FOR PHYSICIANS
TEACHING SESSIONS CONDUCTED IN APRIL, MAY**

<i>Date</i>	<i>Consultant</i>	<i>Morning</i>	<i>Afternoon</i>	<i>Night</i>	<i>Transportation</i>
Tue 4/6	Dr. Geo. Ackerman	Dumas	Monticello	----	Auto
Fri 4/9	Dr. Marvin Murphy	Dermott	Cancelled	----	Auto
Tue 4/13	Dr. Geo. Ackerman	Mountain Home	Harrison	Harrison	Charter
Tue 4/13	Dr. Arthur Ham	----	----	Stuttgart	Drive
Wed 4/14	Dr. Wm. Sodeman	Lake Village	McGehee	----	Auto
Tue 4/20	Dr. Robt. Abernathy	Warren	Monticello	----	Auto
Fri 4/23	Dr. Jas. Doherty	Dermott	----	----	Charter
Tue 5/4	Dr. Dungan	Dumas	Monticello	----	Auto
Tue 5/4	Dr. Berry	----	----	Fayetteville	Auto
Fri 5/7	Dr. Louis Sanders	Dermott	----	----	
Tue 5/11	Dr. Abernathy	----	----	Stuttgart 6:30	Auto
Wed 5/12	Dr. Owen Beard	Lake Village	McGehee	----	Auto
Thur 5/13	Dr. Ackerman	Siloam Springs	Fayetteville	Springdale	Skyway Charter
Tue 5/18	Dr. Pat Flanigan	----	Harrison	Harrison	
Tue 5/18	Dr. Geo. Ackerman	Warren	Monticello	----	
Tue 5/18	Dr. G. Doyne Williams	----	----	Helena	
Tue 5/18	Dr. Wm. Sodeman	Mountain Home	----	----	Charter
Fri 5/21	Dr. A. Hant	Dermott	----	----	
Wed 5/26	Dr. Jas. Doherty	Lake Village	McGehee	----	Charter



Attachment No. 3

Attachment No. 3 consisted of a brochure: FREE FOR PHYSICIANS OF ARKANSAS — Toll-Free Medical Information Service, 8:00 A.M. to 12:00 MIDNIGHT. The numbers for the service are: Little Rock area — 374-9393; Wats Line Number — 1-800-482-8488. The brochure describes the service as follows: “This medical information service is offered to all MD’s in the State of Arkansas by the Arkansas Regional Medical Program, University of Ar-

kansas School of Medicine and the Veterans Administration. This is your Dial Access Directory printed as a temporary measure until all tapes are catalogued. Most of the tapes were made available by the Wisconsin Regional Medical Program. Tapes with authors in Missouri, Minnesota and New Jersey were made available by the Regional Medical Programs in those States.” An alphabetical index of subjects of tapes, and a cross-index by subject area followed.

PROCEEDINGS



The hotel orchestra played for dancing during the banquet on Tuesday, April 27, 1971. In the center foreground, Dr. and Mrs. A. S. Koenig visit with Dr. and Mrs. Lynn Harris.



Dr. and Mrs. Robert Watson and Dr. and Mrs. Louis McFarland enjoying cocktails courtesy of Blue Cross-Blue Shield, Vapors, Monday, April 26, 1971.



Dr. and Mrs. James Bethel (a host and hostess for Council reception on Sunday, April 25, 1971) visit with Mrs. Mason Lawson, past president of the AMA Auxiliary, and other ladies of the Auxiliary.



Dr. and Mrs. Bascom Rancey, Dr. and Mrs. Banks Blackwell, and Dr. Allie Andrews enjoying themselves at cocktail party at Vapors, April 26, 1971.

RESOLUTION

FROM: Miller County Medical Society
SUBJECT: Identifying non-medical costs

WHEREAS, physicians are receiving unfavorable and often unfair publicity because of the rising cost of medical care, and

WHEREAS, much of the increased cost of practicing medicine results from services only indirectly related to patient care, and

WHEREAS, the volume of insurance and other third-party claim forms has increased to an expensive and burdensome load, and

WHEREAS, many physicians are covering the costs of these ancillary services in their charges for patient care, and

WHEREAS, organized medicine has repeatedly taken a stand in opposition to hidden charges and incorrectly assigned costs,

NOW, THEREFORE, BE IT RESOLVED that the Arkansas Medical Society and the Texas Medical Association encourage its members to identify these and other non-medical costs properly by itemization and appropriate charges.

RESOLUTION

FROM: Pulaski County Medical Society
SUBJECT: Membership Directory

WHEREAS, the physician members of the Arkansas Medical Society live and practice in areas which are far removed from other members of the Society, and

WHEREAS, there are few occasions when it is possible to meet and to know many fellow physicians, and

WHEREAS, a need exists among the members of the Arkansas Medical Society to have some means of identifying other members of the Society with whom they seldom have contact;

BE IT THEREFORE RESOLVED, that the House of Delegates of the Arkansas Medical Society be requested to consider the compilation and publication of a Membership Directory of all members of the Arkansas Medical Society which would include a photograph of each member and other pertinent information.

RESOLUTION

FROM: Union County Medical Society
SUBJECT: Request for Report of Action on 1970 Resolution

WHEREAS, the resolution on Medical Ethics was passed by the House of Delegates of the Arkansas Medical Society in its regular annual session in April 1970, and

WHEREAS, this resolution required the officers and Council of the Arkansas Medical Society to prepare a declaration concerning the ethics involved in the relationship of physicians to "third parties", and

WHEREAS, this resolution requested that the Arkansas Medical Society initiate action to cause the American Medical Association also to develop an ethical code to guide physicians in their relationship with "third parties", and

WHEREAS, both of these actions are deemed timely and urgently needed and yet to our knowledge neither of these instructions has been carried out, now

THEREFORE, LET IT BE RESOLVED by the House of Delegates of the Arkansas Medical Society in its regular annual meeting, that the officers and Council of the Arkansas Medical Society which were asked to act in 1970 are instructed to give a detailed report to this House of Delegates guiding physicians' relationships to "third parties". This report should include such controversial areas as fee disputes and disclosure of confidential information. If no report is prepared, an explanation must be given as to why it has not been prepared, and a date should be given when this material will be presented to this Society, and

BE IT FURTHER RESOLVED that the Arkansas Medical Society delegates to the American Medical Association in 1970 are instructed to present a report to this House of Delegates concerning their efforts to present this resolution to the American Medical Association, the results of those efforts and their suggestions as to further action by our delegates to see that this resolution is implemented in the American Medical Association.

PROCEEDINGS



Dr. and Mrs. Rhys Williams, Dr. Ben Saltzman, Dr. and Mrs. G. Allen Robinson, and Dr. and Mrs. Mahlon Maris at the Vapors cocktail party on Monday, April 26, 1971.



Members enjoy dancing during the dinner at the Vapors, Monday, April 26, 1971.



Council Reception, Sunday, April 25, 1971. Dr. T. Duel Brown, Mrs. Elvin Shuffield, Mrs. Allie Andrews, Mrs. Karlton Kemp.



Members enjoy dancing during the dinner at the Vapors, Monday, April 26, 1971.

**SOCIETY LEGAL COUNSEL'S LETTER TO
UNION COUNTY MEDICAL SOCIETY**

**Law Offices
WARREN & BULLION
Tower Building
Little Rock, Arkansas 72201**

March 30, 1971

Grady E. Hill, Jr., M.D.
President
Union County Medical Society
615 West Grove
El Dorado, Arkansas 71730

Dear Doctor Hill:

At the request of the Council of the Arkansas Medical Society, I am writing you concerning the several resolutions which have been adopted by the Union County Medical Society concerning the ethics involved in the relationship of physicians to so called "third parties".

The entire problem arises from the fact that the privileged communication doctrine is one which is peculiarly for the benefit of the patient under modern law. For example, Ark. Stats. 28-607 provides:

"Physicians and nurses — Exemption. — Hereafter no person authorized to practice physic or surgery and no trained nurses shall be compelled to disclose any information which he may have acquired from his patient while attending in a professional character and which information was necessary to enable him to prescribe as a physician or do any act for him as a surgeon or trained nurse. Provided, if two (2) or more physicians or nurses are, or have been in attendance on the patient for the same ailment, the patient by waiving the privilege attaching to any of said physicians or nurses, by calling said physician or nurse to testify concerning said ailment, shall be deemed to have waived the privilege attaching to the other physicians or nurses. (Rev. Stat., ch. 158, S 22; Act Mar. 2, 1899, No. 31, S 1, p. 38; C.&M. Dig. S 4149; Acts 1937, No. 251, S 1, p. 909; Pope's Dig., S 5159.)"

The Arkansas Supreme Court has held that the physician-patient privilege was unknown at common law; in other words, at common law communications between a physician and patient

were not privileged and that the privilege arises solely by statute. *Wimberly v. State* 217 Ark. 130. As may be observed from the above quotation from statute, the patient may waive the privilege, even though in the absence of such a waiver a physician may not testify as to any information which he has acquired from his patient while attending him in a professional character. Our courts have held that this statute was enacted as a matter of public policy to prevent physicians from disclosing to the world infirmities of their patients without their consent. Please note that it's the patient's consent which is required by the statute and not the physician's consent.

Section 9 of the Principles of Medical Ethics of the American Medical Association reads as follows:

"A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community".

The Judicial Council of the AMA has held that medical facts acquired during the physician-patient relationship may be disclosed if the patient has consented to the disclosure. This ruling is in conformity with existing law.

I doubt seriously if any amendment to the Principles of Medical Ethics would override statutory and case law.

I am sure you are aware that Arkansas law forbids "the willful betraying of professional secrets" by a physician. Such wrongful act is grounds for a revocation of a physician's license under Ark. Stats. 72-613. If the patient consents to the physician's making known the professional secret, the statute has no application.

What I have meant to convey to you by the above is that irrespective of my belief that certain government agencies are taking advantage of ignorant people by requiring the execution of waivers of privilege before permitting these unfortunate people to receive aid badly needed by them, such requirements are permitted by law and the medical profession is powerless to prevent this. What would be needed is not a change

in principles of ethics but a change in statutory law.

Sincerely,
/s/ Eugene R. Warren
Eugene R. Warren

ERW/cab

cc: Paul Schaefer
214 N. 12th
Ft. Smith, Arkansas 72901
Kenneth R. Duzan, M.D.
443 West Oak
El Dorado, Arkansas 71730

RESOLUTION

FROM: Union County Medical Society

SUBJECT: Study of Code of Ethics

WHEREAS, there has been, during recent years, progressive domination and modification of the practice of Medicine in the United States by non-medical power structures, and

WHEREAS, the extent of medical domination by governmental and quasi-governmental agencies and by numerous insurance companies has caused weakening, deterioration, neglect, desecration and abandonment of the medical ethical code.

BE IT RESOLVED that the Arkansas Medical Society introduce a motion before the House of Delegates of the American Medical Association in the 1971 convention to the effect that the Principles of Ethics of the AMA be studied, revised, if necessary, to become appropriate to the present era; and that this code of ethics be enforced or, if unenforceable, forever abandoned.

BE IT FURTHER RESOLVED that the Board of Trustees of the AMA be required by the House of Delegates of the AMA to inform the Congress of the United States, the American people and the medical profession of the status of the prevailing medical ethics code, particularly insofar as this code applies to third party factors in the practice of medicine.

REPORT OF THE MEDICAL SCHOOL COMMITTEE

Ross Fowler, M.D., Chairman

The Medical School Committee of the Arkansas Medical Society respectfully submits the following report:

Four members of the Medical School Committee, Doctors Kutait, Hyatt, Crow and Fowler, Chairman, met with six heads of departments of the Medical School, Doctors Campbell, Barclay, Reese, Bost, Abernathy, Tudor and Dean Shorey at the Medical Center, March 14, 1971.

Health Man Power and Health Care in Arkansas was discussed with all agreeing to the critical shortage of physicians in the rural areas. Fifty-five percent of Arkansas physicians are in five urban counties and only 11% of recent graduates have gone to towns of under 10,000 population. Conditions accounting for nearly 90% of graduates going into specialties, research, and teaching were discussed. Instructor influence, choice of students, optional preceptorship and an elective course of study in the senior year received attention. Decrease in academic requirements, discontinuing vacations, admitting more students and making the Medical School a three year course were considered as possible ways to produce more physicians.

It was agreed that the Medical Center was capable of graduating competent, confident, and qualified medical practitioners of any type desired, that they had the best students, faculty and facilities they have ever had, but that more money and facilities were needed for expansion.

It was discussed that improving the educational, cultural, social, economic, recreational and psychological conditions along with improved health facilities would enhance the chances of obtaining more rural physicians.

Governor Bumpers' interest in rural health care was discussed and he or a representative of his office will be invited to the Committee's next meeting, scheduled as a breakfast meeting at the Annual State Medical Society Meeting at Hot Springs.



PROCEEDINGS



James D. Mashburn, Hoyt L. Choate, Edgar J. Easley, and Joe Beasley enjoying fellowship at Council reception, Sunday, April 25, 1971.



There was a good crowd for the Council reception on Sunday, April 25, 1971, in the Ballroom of the Arlington.



Members of the Council and their wives at Council reception on Sunday, April 25, 1971. Dr. and Mrs. Dwight W. Gray (center) and Dr. and Mrs. Paul Gray.

SCIENTIFIC SESSIONS

The First Vice President of the Society, Wright Hawkins of Fort Smith, presided at the scientific session on Monday morning. The program opened with a showing of the film "The Team Physician". The lectures for the session were: "Management of the Hyperactive Child", John E. Peters, Professor and Chairman, Division of Child and Adolescent Psychiatry, University of Arkansas School of Medicine; "The Use of L DOPA in the Treatment of Parkinsonism", Dennis D. Lucy, Associate Professor and Chairman of the Division of Neurology at the University of Arkansas School of Medicine; "Management of Acute Myocardial Infarction", Jack L. Davis, Assistant Professor of Medicine, University of Arkansas School of Medicine; "Medical and Legal Problems in the Management of Diabetes", Coy D. Fitch, Associate Professor of Internal Medicine and Biochemistry, St. Louis University School of Medicine; Mr. Sidney S. McMath, former Governor and practicing attorney, Little Rock; Louis L. Sanders, Associate Professor of Medicine, University of Arkansas School of Medicine; James O. Wynn, Professor of Medicine, Head of Section of Endocrinology of the University of Arkansas School of Medicine, and James L. Dennis, Vice President for Health Sciences of the University of Arkansas Medical Center.

Porter R. Rodgers, Jr., of Searcy, Second Vice President of the Society, presided at the scientific session on Monday afternoon. F. T. Fraunfelder, Associate Professor and Chairman of the Department of Ophthalmology at the University of Arkansas School of Medicine, was the first speaker, his subject was "Detection and Management of Common Ocular Problems". Other speakers and their subjects were: "Current Management of Common Problems of the Skin", G. Thomas Jansen, Professor and Chairman of the Division of Dermatology of the University of Arkansas School of Medicine; "Therapy of Tuberculosis", Robert S. Abernathy, Professor and Chairman of the Department of Med-

icine at the University of Arkansas School of Medicine; W. Duane Jones, Medical Director of the State Sanatorium; Donald L. Miller, Chest Clinic Consultant for the State Health Department, Pine Bluff; Robert L. Mayock, Professor of Medicine and Chief of Pulmonary Disease Section of the University of Pennsylvania School of Medicine, Philadelphia; Winston K. Shorey, Dean of the University of Arkansas School of Medicine; "Management of Pain", Ferdinand E. Greifenstein, Professor and Chairman of the Division of Anesthesiology of the University of Arkansas School of Medicine, and Stevenson Flannigan, Professor and Chairman of the Division of Neurosurgery of the University of Arkansas School of Medicine.

The film "The Team Physician" was again shown on Tuesday morning. Following the film, Rhys A. Williams, Harrison, Third Vice President, presided at the scientific session. The program was as follows: "What Constitutes Proper Resuscitation of the Severely Burned Patient?", Fred T. Caldwell, Professor of Surgery at the University of Arkansas School of Medicine; "Management of Toxemia of Pregnancy", David L. Barclay, Professor and Chairman of the Department of Obstetrics-Gynecology, University of Arkansas School of Medicine; "Management of the Child with Recurrent Respiratory Infections", Elliot F. Ellis, Associate Professor of Pediatrics at the University of Colorado School of Medicine; "Surgical Therapy of Rheumatoid Arthritis of the Hand", Alfred B. Swanson, Chief of the Department of Orthopaedic Surgery at the Blodgett Memorial Hospital in Grand Rapids, Michigan; "Anesthesiology for the Ambulatory Patient", Charles S. Coakley, Professor and Chairman of the Department of Anesthesiology at George Washington University School of Medicine; and "Infections of the Ear and Upper Respiratory Tract", James B. Snow, Jr., Professor and Chairman of the Department of Otorhinolaryngology at the University of Oklahoma School of Medicine.



RELATED MEETINGS

TUMOR CLINIC

The Association of Tumor Clinic Staff Members in Arkansas met on Monday in the Arlington Hotel with C. Stratton Hill, Jr. of Houston as guest speaker. Association Chairman Thomas E. Bell presided.

EYE, EAR, NOSE AND THROAT SECTION

Speakers for the Eye program were Joe C. Parker of Little Rock; John S. Kennerdell of Pittsburgh; Gaither Johnston, Jr., of Little Rock, and Morriss Henry of Fayetteville.

James B. Snow, Jr., of Oklahoma City was the speaker for the ENT Section.

A joint luncheon was held for all members of the Section.

ORTHOPAEDICS

The Arkansas Orthopaedic Society held a luncheon meeting on Tuesday at the Rehabilitation Center. Alfred Swanson of Grand Rapids, Michigan, was guest speaker. Charles McKenzie of Little Rock was elected president of the group and Harold Hutson of Little Rock was elected secretary.

PATHOLOGY

The Arkansas Society of Pathologists held a luncheon meeting on Tuesday, followed by a business session.

RADIOLOGY

The Arkansas Radiological Society met on Tuesday for a luncheon, scientific program, and business session. William J. Wilson of Nebraska was guest speaker.

INTERNAL MEDICINE

The Arkansas Society of Internal Medicine held a luncheon meeting on Tuesday.

SURGERY

The Arkansas Chapter of the American College of Surgeons held a luncheon meeting on Tuesday with Bernard W. Thompson of Little Rock as speaker.

OBSTETRICS-GYNECOLOGY

The Society of Obstetricians and Gynecologists held a luncheon meeting on Tuesday.

PEDIATRICS

The Arkansas Chapter of the American Academy of Pediatrics held a luncheon and business meeting on Tuesday and co-sponsored with the Academy of General Practice a panel discussion beginning at 2:00 P.M. Participants in the panel program were Vida H. Gordon, moderator, Elliot F. Ellis, Robert N. McGrew, B. P. Briggs.

UROLOGY

The Urology Section held a luncheon meeting, including a business session and scientific program, on Tuesday. Howard Radwin of San Antonio was guest speaker.

ANESTHESIOLOGY

The Anesthesiology Society met for a luncheon meeting on Tuesday with Charles S. Coakley of Washington, D.C., as guest speaker.

GENERAL PRACTICE

The Arkansas Academy of General Practice held a luncheon meeting on Tuesday and then joined with the Pediatrics group for a panel program.



President Jack Kennedy, Mrs. Kennedy, President-elect Stanley Applegate, and Mrs. Applegate (partially hidden), greeting Mrs. L. A. Whittaker, Dr. Asa Crow and Mrs. Crow. Council reception, April 25, 1971.

OTHER ACTIVITIES

The Council of the Society hosted a reception on Sunday evening for all members of the Society and their guests. The reception afforded an opportunity for members to become acquainted with the officers of the Society and was a very pleasant affair.

On Monday evening, members of the Society were guests of Arkansas Blue Cross-Blue Shield for a cocktail party at the Vapors Supper Club. Members then enjoyed dinner dutch treat at the club. There was a combo for dancing and Joseph L. Rosenzweig of Hot Springs entertained members with a report on a "membership survey".

The Society hosted a luncheon on Monday for senior medical students at the University of Arkansas School of Medicine. Members of the Council served as hosts and physicians from areas needing additional physicians were urged to attend.

The Society hosted a breakfast for members of the Fifty Year Club on Tuesday, April 27th. The following members of the club were present: W. A. Hudson, Mac McLendon, W. K. Smith, C. W. Jones, Sr., D. L. Owens, D. B. Stough, O. A. Smith, T. N. Black, R. H. Whitehead, Sr., G. C. Coffey, F. J. Scully, A. D. Cathey, J. H. McCurry, G. Allen Robinson, Davis W. Goldstein, James L. Dennis, Vice President for Health Sciences, University of Arkansas School of Medicine, addressed the club. G. Allen Robinson was president of the club during 1970-71 and F. J. Scully is president for 1971-72.

The past presidents of the Arkansas Medical Society were guests of the Society for a breakfast on Wednesday, April 28th.

The annual golf tournament was played at the Belvedere Country Club on Monday, April 26th. The first place trophy went to W. A. Ross of Arkadelphia. John W. Joyce, H. D. Langston, and A. G. Sullenberger tied for the runner-up trophy. Winners in the "blind bogey" drawing were: F. R. Buchanan, Gordon Oates, Karlton Kemp, John Wood, Wilbur Lawson, Grimsley Graham, Paul Henley, H. R. Duckworth, and James G. Stuckey.

A poolside cocktail party preceded the inaugural banquet on Tuesday evening.

PRESIDENT'S INAUGURAL BANQUET

The President's Banquet was held on Tuesday evening, April 27th, in the Ballroom of the Arlington Hotel with the Society president, Jack W. Kennedy, presiding.

The invocation was by Robert Watson of Little Rock.

President Kennedy introduced those seated at the head table as follows: Winston K. Shorey, Little Rock, Chairman of the Convention Committee; Mrs. Shorey; Elvin Shuffield, Little Rock, Secretary of the Arkansas Medical Society; Mrs. Shuffield; Mrs. Kennedy; Stanley Applegate, Springdale, president-elect of the Society; Mrs. Applegate; C. C. Long of Ozark, Chairman of the Council of the Society; Dr. Watson, and Mrs. Watson.

Other special guests introduced by President Kennedy were: Mrs. Harold D. Langston, President of the Woman's Auxiliary to the Arkansas Medical Society; Mrs. W. Myers Smith, President-elect of the Woman's Auxiliary to the Arkansas Medical Society; Mrs. C. Lynn Harris, Immediate Past President of the Woman's Auxiliary to the Arkansas Medical Society; Mrs. Marilyn Pryor, President of the Arkansas State Medical Assistants Society; Mr. Sam McGuire, President of the Arkansas Chapter of the Student American Medical Association; Mrs. Margaret Holzworth, President of the Arkansas State Nurses Association; and Mr. James Latture, President of the Arkansas Pharmaceutical Association.

President Kennedy also introduced Mr. John Downes of the Mountain Valley Water Company and expressed thanks to the firm for making Hildegard available to entertain the membership at the banquet.

An announcement was made regarding the winners of the golf tournament. W. A. Ross won the first prize trophy; there was a three-way tie for second place. John Joyce, Harold D. Langston and A. G. Sullenberger were the winners. The trophy was presented to Dr. Langston.

President Kennedy announced that the scientific exhibits at the meeting had been judged and that an anonymous donation made possible

the presentation of cash prizes to the two exhibitors whose exhibits were selected as winners. A \$50 check went to R. Barry Sorrells for his exhibit on "Pollicization of the Index Finger" and a \$25 check went to G. Doyne Williams for the exhibit "Cardiovascular Surgery at the University of Arkansas Medical Center".

President Kennedy expressed thanks to the following and asked that they stand and be recognized: members of the headquarters staff; AMA Delegates C. C. Long and Purcell Smith; Winston K. Shorey, Chairman of the Convention Committee; Elvin Shuffield, Chairman of the Legislative Committee; Charles F. Wilkins, Jr., Chairman of the Professional Services Review Organization; Harry Hayes, Chairman of the Insurance Committee; John H. Miller, Chairman of the Committee on Medicine and Religion; Carl Williams, Chairman of the Committee on Traffic Safety; John W. Trieschmann, Chairman of the Sub-Committee on Maternal and Child Welfare; Robert Langston, Chairman of the Sub-Committee on Physical Fitness and School Health; Wilbur Lawson, Chairman of the Immunization Sub-Committee; A. C. Bradford, Chairman of the Public Relations Committee; and Joe Verser, Secretary of the Arkansas State Medical Board. President Kennedy also expressed thanks to all other members of committees who had served during his term as president, the other officers who had served with him, and the membership.

Chairman of the Council C. C. Long read telegrams from Governor Dale Bumpers, Senator John L. McClellan, and Congressman David Pryor commending President Jack Kennedy for his year as president and congratulating President-elect Stanley Applegate as he assumes the office of president.

President Kennedy read the names of living past presidents and asked those present to stand and be recognized. The following past presidents were in attendance: T. Duel Brown, Little Rock; H. King Wade, Jr., Hot Springs; Joe Verser, Harrisburg; C. R. Ellis, Malvern; C. Lewis Hyatt, Monticello; L. A. Whittaker, Fort Smith; Joseph A. Norton, Little Rock; H. W. Thomas, Dermott, and Ross Fowler, Harrison.

Dr. Kennedy administered the oath of office of president of the Arkansas Medical Society to Stanley Applegate of Springdale, and presented him with a gavel inscribed "Presented to Dr.

Stanley Applegate, President 1971-72, Arkansas Medical Society, by Dr. Jack W. Kennedy, President 1970-71".

In accepting the office of president, Dr. Applegate made the following remarks:

Ladies and gentlemen, thank you very much. This concludes my acceptance speech as written by Paul Schaefer; and now that the speech is out of the way, I want to share a few thoughts with you about the future of medical practice in Arkansas.

As most of you know, a good part of the legislation in our State Legislature this past session had to do with health measures and one of these that passed allow osteopaths to practice medicine in Arkansas. One that passed and was vetoed by Governor Bumpers had to do with increasing the recognition of optometrists.

In case you didn't know, there is a big push on the national level for a plan for medical care for everyone — this includes preventive care, obstetrics care, etc., for everyone up to sixty-five years where Medicare then takes over. There are already at least five plans in the mill at the present and they vary from the Kennedy Plan at one extreme (which gives everything for nothing) to one proposed by the AMA which is called Medcredit which is more of an insurance policy that would be paid for by the Government if the individual cannot pay and would be paid for by the individual if he is able and the cost of the policy would be deducted as credit on paying his income tax.

With these facts in mind, I would like to encourage each and every one of you to start thinking about the elections of 1972. It is going to take time and money but these are the facts of life. If we are going to have laws that we can live and practice with, it is necessary that we, the doctors and our wives and families, take an active part in electing persons who are sympathetic with our cause.

What it all boils down to is that we are going to have to get our hands out of our pockets, get our money where it talks and pick some winners in this political horse race.

Dr. Applegate presented to Dr. Kennedy a plaque expressing the appreciation of the Society for his service to the medical profession and to the people of Arkansas.

Dr. Applegate introduced the "incomparable" Hildegard. With the accompaniment of the

hotel orchestra and her own piano, Hildegard sang songs which were popular during the past one hundred years. Her excellent voice and outstanding talent as a pianist completely captivated the crowd, who gave her a standing ovation on the completion of her performance.

The hotel orchestra played for dancing in the ballroom following the banquet.

MEMORIAL SERVICE

A joint Memorial Service of the Arkansas Medical Society and the Woman's Auxiliary to the Arkansas Medical Society was held on Tuesday, April 27th, in the Ballroom of the Arlington Hotel. The president of the Society, Jack W. Kennedy, presided.

Invocation was by Wayne Lazenby of Dumas.

Mrs. Paul Gray, soprano, sang, "Angels, ever bright and fair" by F. F. Handel. She was accompanied by Mr. Herman Hess.

Dr. Kennedy read the following names of deceased members of the Society:

Gorce Bisco, Dumas
William H. Briet, Harrison
Richard J. Brightwell, Fayetteville
S. T. W. Cull, Little Rock
W. A. Fowler, Fayetteville
William H. Gibbons, Ozark
John T. Gray, Jonesboro
Wilburn M. Hamilton, Little Rock
Glen M. Holmes, Little Rock
Evan G. Houston, Magnolia
Paul H. Jeffery, Batesville
Evan J. Kurts, West Helena
Hugh J. Mayfield, El Dorado
Fay B. Millwee, McCrory
Joe W. Reid, Arkadelphia
R. B. Robins, Chicago
J. M. Robinson, Little Rock
H. King Wade, Sr., Hot Springs
Elmer G. Wakefield, Texarkana

Mrs. C. Lynn Harris, President of the Auxiliary, read the following names of deceased members of the Auxiliary:

Mrs. John R. Dibrell, Little Rock
Mrs. F. A. Gray, Batesville
Mrs. Arthur C. Linton, Hector
Mrs. W. M. McRae
Mrs. Grady W. Reagan, Little Rock
Mrs. John H. Williams, Marshall

MEMORIAL ADDRESS

C. Lewis Hyatt

Will you please join with me in a few moments of silent meditation and prayer for these beloved individuals whose names have just been read.

Our Father, we thank Thee for the years we were privileged to spend with these Dear Ones, our husbands, wives, colleagues and friends. Help us to close ranks and carry on our duties and responsibilities in the manner in which they would have wanted us to do. Amen.

Jesus said, "Let not your heart be troubled: ye believe in God, believe also in me.

"In my Father's house are many mansions: if it were not so, I would have told you. I go to prepare a place for you.

"And if I go and prepare a place for you, I will come again, and receive you unto myself; that where I am, there ye may be also."

(John 14:1-3)

Since my graduation from the University of Arkansas School of Medicine in 1938, I have sat where you are sitting many times and heard many such lists read which contained names of some of my closest family members, a brother who was like a twin, an uncle with whom I was associated, two close friends who were my roommates through medical school, and many instructors, professors, schoolmates, close friends and wives of my close friends.

I can clearly visualize, as if yesterday, memories of some of the outstanding people of medicine of this State, and members of the Auxiliary. Among my respected and beloved colleagues were older men who were pillars of organized medicine in Arkansas: Dean Frank Vinsonhaler, Dr. Joe Shuffield, Dr. Fount Richardson, Dr. Lou Hundley, Dr. Jim Kolb are only a few of the older group, and many others were very young and active when taken. Whether they had completed many years of faithful work or were called from the midst of a busy practice, the one characteristic of all was dedication to their profession and to their patients. All labored diligently; some were hastened to their death by their arduous work and responsibilities. All helped to leave us a Profession better in every way for their having worked to improve, protect and preserve it. Many had fulfilled their life's goals in every way but labored on for us.

The Bridge Builder
An old man, going a lone highway,
Came at the evening, cold and gray
To a chasm, vast and deep and wide,
Through which was flowing a sullen tide.
The old man crossed in the twilight dim;
The sullen stream had no fears for him;
But he turned when safe on the other side
And built a bridge to span the tide.

"Old man," said a fellow pilgrim near,
"You are wasting strength with building here;
Your journey will end with the ending day;
You never again must pass this way;
You have crossed the chasm, deep and wide —
Why build you the bridge at the eventide?"

The builder lifted his old gray head:
"Good friend, in the path I have come,"
he said,
"There followeth after me today
A youth whose feet must pass this way.
This chasm that has been naught to me
To that fair-haired youth may a pitfall be.
He, too, must cross in the twilight dim;
Good friend, I am building the bridge
for him."

Will Allen Dromgoole

We must all realize that as each year passes
we have moved closer to the list containing our
name which will be read at this Memorial Service.
Will we have accomplished our mission as
these great men and women before us have? I
truly hope so.

Alfred, Lord Tennyson, at age 81, a few days
prior to his death, when he knew he was about
to be called Home, penned these immortal lines:

Crossing the Bar
Sunset and evening star,
And one clear call for me!
And may there be no moaning of the bar,
When I put out to sea,
But such a tide as moving seems asleep,
Too full for sound and foam,
When that which drew from out of the
boundless deep
Turns again home.
Twilight and evening bell,
And after that the dark!
And may there be no sadness of farewell,
When I embark;

For though from out our bourne of Time
and Place
The flood may bear me far,
I hope to see my Pilot face to face
When I have crossed the bar.

Finally, the last nine lines of the well known
classic by William Cullen Bryant, *Thanatopsis*
(*A Meditation on Death*), was written when he
was a very young man in his teens, but it ex-
presses beautifully what we all hope to do, and
it helps to lift the sadness of those of us whose
loved ones have gone on before.

"So live, that when thy summons comes to join
The innumerable caravan which moves
To that mysterious realm where each shall take
His chamber in the silent halls of death,
Thou go not, like the quarry-slave at night,
Scourged to his dungeon, but, sustained and
soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams."
#

Invocation was by Raymond Irwin of Pine
Bluff.

FINAL MEETING HOUSE OF DELEGATES

Speaker of the House Amail Chudy called the
final meeting of the House of Delegates to order
at 10:00 A.M. on Wednesday, April 28, 1971,
in Room "C" of the Arlington Hotel. He called
on C. Lewis Hyatt for the invocation.

The Executive Vice President, Mr. Schaefer,
called the roll of members. The following dele-
gates, officers and members seated as delegates
by action of the House were present:

ARKANSAS, R. H. Whitehead, Sr.; BAXTER,
Jack C. Wilson; BOONE, Robert Langston;
CHICOT, John P. Burge; CLARK, Eli Gary;
COLUMBIA, Charles L. Weber; CRAWFORD,
M. C. Edds; DALLAS, Jack Dobson; DREW,
C. Lewis Hyatt; FAULKNER, Charles Archer,
Jr.; GARLAND, William R. Mashburn, Thomas
E. Burrow; GREENE-CLAY, A. J. Baker; HEMP-
STEAD, Lowell O. Harris; HOT SPRING,
Robert H. White, HOWARD-PIKE, M. H.
Wilmoth; JACKSON, Wayne Stanfield; JEF-
FERSON, T. E. Townsend; LOGAN, W. Duane
Jones; LONOKE, Fred C. Inman; MILLER,

Allie E. Andrews, Jr; NEVADA, H. Blake Crow; POLK, John Wood; POPE-YELL, Roy Millard; PULASKI, F. R. Buchanan, Frank T. Padberg, James L. Smith; Robert Watson, G. Thomas Jansen, Winston K. Shorey, E. Stewert Allen, Frank E. Morgan, Gilbert O. Dean, Edgar J. Easley, Frank M. Westerfield, James R. Weber, John V. Satterfield, Guy R. Farris, Fred J. Kittler, George Mitchell; SALINE, Donald L. Viner; SEBASTIAN, Carl L. Williams, Kemal Kutait, Homer G. Ellis, R. C. Goodman, A. C. Bradford; UNION, Jacob P. Ellis; WASHINGTON, James D. Mashburn, Robert A. Etherington, Rogers P. Edmondson; COUNCILORS Eldon Fairley, Bascom P. Raney, Paul Gray, Dwight W. Gray, L. J. Pat Bell, Raymond Irwin, Kenneth R. Duzan, George F. Wynne, Karlton H. Kemp, W. Payton Kolb, William S. Orr, Morriss Henry, Henry V. Kirby, C. C. Long, A. S. Koenig; PRESIDENT Stanley Applegate; FIRST VICE PRESIDENT Wright Hawkins; SPEAKER Amail Chudy; VICE SPEAKER Charles F. Wilkins, Jr.; SECRETARY Elvin Shuffield; TREASURER Ben N. Saltzman, and PAST PRESIDENTS W. R. Brooksher, C. Lewis Hyatt, H. W. Thomas, Ross Fowler, L. A. Whitaker, Joe Verser, and Jack W. Kennedy.

Speaker Chudy called for the report of the Nominating Committee. Joe Verser, Chairman of the Nominating Committee, gave the following report:

For President-elect—

Robert Watson, Little Rock

H. W. Thomas, Dermott

For First Vice President—

Winston K. Shorey, Little Rock

For Second Vice President—

Lee B. Parker, Jr., Fayetteville

For Third Vice President—

Roy I. Millard, Russellville

For Treasurer—

Ben N. Saltzman, Mountain Home

For Secretary—

Elvin Shuffield, Little Rock

For Speaker of the House—

Amail Chudy, North Little Rock

For Vice Speaker of the House—

Charles F. Wilkins, Jr., Russellville

For Councilor—

Eldon Fairley, Osceola

Paul Gray, Batesville

Dwight W. Gray, Marianna

Raymond A. Irwin, Pine Bluff

Kenneth R. Duzan, El Dorado

Karlton Kemp, Texarkana

James C. Bethel, Benton

W. Payton Kolb, Little Rock

Morriss Henry, Fayetteville

C. C. Long, Ozark

For Delegate to the American Medical Association (term from January 1, 1972, to December 31, 1973)—

Purcell Smith, Little Rock

For Alternate Delegate to the American Medical Association (term from January 1, 1972, to December 31, 1973)—

T. E. Townsend, Pine Bluff

For Member-at-Large position, Arkansas State Board of Health—the following three nominees were approved by the House—

William S. Orr, Jr., Little Rock

George F. Burton, El Dorado

Milton Lubin, West Memphis

Upon the motion of Elvin Shuffield and C. C. Long, the House accepted the report and elected by acclamation all nominees on the slate except those for president-elect.

H. W. Thomas requested that his name be withdrawn from the slate of nominees for the position of president-elect and that Robert Watson be elected by acclamation. Upon second by C. C. Long, the House so voted.

Speaker Chudy requested that Pulaski County members, James Weber and Payton Kolb, escort the new president-elect to the rostrum. Robert Watson made the following remarks in accepting the office of president-elect of the Society:

“During the last few days I have become all the more cognizant of the responsibilities the office of president-elect of the Society implies and, with assurance, I promise you that two years from now you will have said that Bob Watson made a good president. Thank you.”

Speaker Chudy called for the report of Reference Committee No. 1.

REPORT OF REFERENCE COMMITTEE NO. 1

Carl L. Williams, Chairman

Reference Committee Number One has given deliberation to all reports and resolutions assigned to it and submits the following recommendations:

The Reference Committee recommends adoption of the following committee reports as written: Committee on Public Health (Rural Health), the Sub-Committee on Physical Fitness and School Health and the Committee commends the Sub-Committee on Physical Fitness for its work in sponsoring the "Red and White Symposium on Athletic Injuries".

Dr. Williams moved adoption of this portion of the report of Reference Committee No. 1. Upon second by William S. Orr, the House so voted.

The Reference Committee recommends adoption of the Immunization Sub-Committee report, the Committee on Medical Education report and the Committee on Emergency Health Services report and the Reference Committee commends the Health Services Committee for its activities in sponsoring the Emergency Health Services Conference.

Dr. Williams moved adoption of this portion of the report of Reference Committee No. 1. Upon second by A. S. Koenig, the House so voted.

The Reference Committee recommends adoption of the Professional Relations Committee reports from the First Councilor District, Second Councilor District, Fourth Councilor District, Fifth Councilor District, Seventh Councilor District and the Eighth Councilor District.

Dr. Williams moved adoption of this portion of the report. There being no objection, it was so ordered.

The Reference Committee recommends adoption of the Report of the Sub-Committee on Industrial Health as written.

Dr. Williams moved adoption of this portion of the report and it was so ordered.

The Reference Committee recommends adoption of the resolution from the Pulaski County Medical Society recommending changes in the Society membership directory.

Dr. Williams moved adoption of this portion of the report; second was by George F. Wynne.

There was considerable discussion regarding the intent of the Reference Committee recommendation. It was pointed out that the resolution called for the House only to consider the compilation and publication of a membership directory which includes photographs and other pertinent information.

James L. Smith of Pulaski County presented a substitute motion which recommended that the matter be considered further by the House of Delegates at the 1972 Annual Session and that pertinent information regarding costs, feasibility, etc., be presented to the House for action at that time. Upon second by Winston Shorey, the House so voted.

The Reference Committee, on review of the Sub-Committee on State Health and Medical Resources for Civil Defense report, recommends that the title of the bill proposed to the 1971 General Assembly be expanded to read as follows: "An Act to authorize the State Board of Health to initiate and administer emergency relief, evacuation, medical and other emergency actions in case of nuclear disaster and any other major natural disaster and to provide funds for those purposes and for other purposes". The remaining portion of the report was accepted as written. Dr. Williams moved adoption of this portion of the Reference Committee report. Elvin Shuffield made a substitute motion for deletion of the word "natural" so that the title would read... "in case of nuclear disaster and any other major disaster...". Upon second by Kutait, the House so voted. This portion of the Reference Committee report was then approved as amended.

The Reference Committee reviewed the report of the Arkansas State Advisory Committee to the Selective Service System and found no problems in the field at the time the report was written. However, since the report has been written, it has come to the attention of the Medical Society that many physicians in Eastern Arkansas who have been in practice for only two or three years are now receiving Selective Service calls. It was also noted that many of the physicians completing medical school and internship are not receiving Selective Service calls. The Reference Committee, therefore, recommends that appropriate steps be taken to inform the Selective Service System of the extreme physician shortage in Eastern Arkansas and of the medical pro-

profession's feelings that these physicians should be deferred from military service as long as physicians are available from other sources.

Dr. Williams moved adoption of this portion of the Reference Committee report. Upon motion of Jack Wilson and George Wynne, the House voted to delete reference to "Eastern" Arkansas. After discussion, and upon the motion of Karlton Kemp and A. S. Koenig, the House voted to bring the matter to the attention of the Arkansas State Advisory Committee to the Selective Service System and, following its recommendation, appropriate action be taken. The Speaker then ruled that this action of the House removed this portion of the Reference Committee report, and was sustained by the House.

Reference Committee Number 1 reviewed the report of the Executive Vice President, Mr. Schaefer, and felt that his report should be accepted in its entirety but that the services available to the specialty organizations throughout the State had not been emphasized strongly enough during the past. It was the opinion of the committee that in an effort to prevent further fragmentation and dissolution of the strength of the Arkansas Medical Society that intensive efforts be made to aid the specialties in their administrative, clerical, mailing and postgraduate study programs. Dr. Williams moved adoption of this section of the reference committee report and it was so ordered.

Reference Committee Number 1 reviewed the report of the School of Medicine and recommends receiving this as information. It was so ordered by the Speaker.

Reference Committee Number 1 reviewed the Resolution on Physician Assistants from the Washington County Medical Society and recommends that this resolution be tabled pending AMA recommendations regarding physician assistants. Dr. Williams moved adoption of this section of the report and it was so ordered.

The Reference Committee reviewed the Legislative Committee report and felt that the report should be adopted with the following alterations in the recommendations of the committee: Recommendation 2 was accepted as written, Recommendations 3 and 4 were accepted as written, and Recommendation 5 was accepted as written. In lieu of Recommendations 1 and 6, which are related to problems presenting themselves to the

Legislative Committee in which the Legislative Committee found it difficult to relate to our fellow Arkansans in the Legislature and, also, found difficulty in responsible leadership being lacking in certain areas of the Society's districts, the following recommendation is made: That a committee be appointed to review and analyze the Arkansas Medical Society's governing bodies, tenure of office, ascending responsibility, and that organizational consultants be asked to review the Arkansas Medical Society's organization in an effort to strengthen the organization's ability to incorporate all physicians throughout the State in its activities and to improve its abilities to relate to the people of Arkansas and deliver service to them. It is further recommended that this committee make its report to the Constitution and By-Laws Committee before the 1972 spring session so that any changes recommended by this committee could be implemented. Dr. Williams moved adoption of this section of the reference committee report and it was so ordered.

The Reference Committee was of the opinion that the Committee on Medical Education and the Committee on Continuing Education should be combined with the section of medical education concerning itself primarily with the Arkansas Medical School educational program and the section of continuing education being related to the practicing physicians' educational programs. The Reference Committee commends Lee Parker of Fayetteville for his long expended hours and work accomplished in the initiation of the continuing education program and feels that the Society should expand this activity as soon as funds become available. Dr. Williams moved adoption of this section of the reference committee report and it was so ordered.

The report of Reference Committee Number One as a whole was accepted by the House as amended. Speaker Chudy expressed his thanks to the members of the Reference Committee.

T. E. Townsend of the Immunization Sub-Committee spoke briefly with regard to the Immunization Sub-Committee's report. As a matter of information, he advised members of the House that there is an outbreak of red measles in Arkansas. The committee feels that physicians of the State should consider re-immunization of those children who had the measles vaccine or had gamma globulin along with the vaccine at an age under one.

REPORT OF REFERENCE COMMITTEE NO. 2

Frank Padberg, Chairman

Mr. Speaker and members of the House of Delegates:

This Reference Committee gave careful consideration to the items referred to it and makes the following report.

1. *Report of the Sub-Committee on Liaison with the State Board of Health — Karlton H. Kemp, Chairman.*

2. *Report of the Sub-Committee on Tuberculosis—Robert M. Franklin, Chairman.*

3. *Report of the Committee on Continuing Education—George F. Wynne, Chairman.*

4. *Report of the Advisory Committee to the State Medical Assistants Society—A. C. Bradford, Chairman.*

5. *Report of the Committee on Medicine and Religion—John H. Miller, Chairman.*

6. *Report of the Professional Services Review Organization—Charles F. Wilkins, Jr., Chairman.*

7. *Report of the Budget Committee—W. R. Brooksher, Chairman.*

8. *Report of the Arkansas State Medical Board—Joe Verser, Secretary.*

9. *Summary of the Arkansas State Department of Health Activities—1970—John T. Heron, State Health Officer.*

10. *Report of the Sub-Committee on Liaison with the Woman's Auxiliary — Amail Chudy, Chairman.*

The reports of the above committees were accepted as written.

Mr. Speaker, I move the adoption of these reports. It was so ordered.

11. *Report of the Committee on Insurance—Harry Hayes, Jr., Chairman.*

Your Reference Committee heard extensive discussion by our guests, Dr. John M. Chenault, member of the AMA Board of Trustees, and Mr. William Eldredge, a Little Rock defense attorney, in response to numerous questions from members of the Society present at the Reference Committee Hearing.

We would recommend that the Council of and the Committee on Insurance of the Arkansas Medical Society should carefully study the items discussed by Dr. Chenault in his appearance before the House of Delegates of the Arkansas Medical Society on April 25, 1971, and that particular

attention be given to the American Medical Association and/or State Medical Society sponsoring of professional liability insurance contracts.

Mr. Speaker, I move the adoption of these reports. So ordered.

Mr. Speaker, this concludes the report of your Reference Committee Number Two and I move for the adoption of the entire report. Upon second by Lewis Hyatt, it was so voted.

Dr. Padberg thanked those who appeared before the Reference Committee, his fellow members on the committee and the special guests.

Speaker Chudy expressed thanks to members of Reference Committee Number Two.

REPORT OF REFERENCE COMMITTEE NO. 3

Ben N. Saltzman, Chairman

Reference Committee Number Three convened at 3:30 P.M. Sunday, April 25th, immediately following adjournment of the opening session of the House of Delegates. All members appointed to the Reference Committee were present. They included Ben N. Saltzman, Chairman; F. R. Buchanan, H. King Wade, Jr., and G. Thomas Jansen. The attendance at the meeting was approximately twenty, varying with the items under discussion. Discussion was spirited in some instances and no comment was made concerning the majority of the items considered.

The items that occasioned no comment and which were essentially non-controversial were the following: Report of the Sub-Committee on Maternal and Child Welfare, Report of the Committee on Mental Health, Report of the Sub-Committee on Liaison with Vocational Rehabilitation, Report of the Committee on Public Relations, Report of the Constitutional Revisions Committee, Report of the Senior Medical Day Committee, Report of the Student AMA Liaison Committee, Report of the Council in its entirety, Report of the American Medical Association meeting November 29 to December 2, 1970, Boston, Massachusetts (Purcell Smith, delegate, was present to answer any questions) and report of the Committee on Arrangements for the Annual Session. The Reference Committee had no comments nor additional recommendations regarding these reports.

Mr. Speaker, I move approval of each of these ten reports. There being no objection, it was so ordered by the Speaker.

The Sub-Committee on Traffic Safety presented a resolution concerning the development of an "emergency health technician" and urged action by this House of Delegates. The resolution is as follows:

WHEREAS, health care to the emergency patient is usually first administered by ambulance attendants, emergency room personnel or perhaps those of lesser training, and

WHEREAS, the ultimate recovery and the possible permanent disability are perhaps related to the quality of this initial medical care, and

WHEREAS, care to the emergency patient and the injured is acknowledged to be the area most in need of improvement, and

WHEREAS, there is no uniform standard of training or performance required of those persons involved in the initial evaluation and transportation of the injured, and

WHEREAS, it is the responsibility of the medical profession to require high quality care to all needing medical care, including the acutely injured,

THEREFORE, the Traffic Safety Committee of the Arkansas Medical Society and the Trauma Committee of the Arkansas College of Surgeons requests the Arkansas Medical Society to consider and act on the following resolution at the April 1971 House of Delegates meeting to present a tangible and worthwhile solution to this dilemma to the State Administration and General Assembly.

RESOLVED that a new health care designation, Emergency Health Technician, be discussed and developed in Arkansas under the guidance and responsibility of the Arkansas Medical Society, and

RESOLVED that a curriculum be established for training Emergency Health Technicians as ambulance attendants, emergency room attendants, and for industrial emergency care, and

RESOLVED that the Arkansas Medical Society formulate standards of achievement to qualify persons for the above designation of Emergency Health Technician, and

RESOLVED that once certified, the Arkansas Medical Society will promote these persons to serve the public in the above emergency health situations, and

RESOLVED that the Arkansas Medical Society be active in developing and promoting these training programs in various regions of the State of Arkansas.

Mr. Speaker, Reference Committee Number 3 urges the adoption of this resolution and I so move. There being no objection, it was so ordered by the Speaker.

Mr. Speaker, I move the approval of the entire report of the Sub-Committee on Traffic Safety. It was so ordered.

The Report of the Medical School Committee of the Arkansas Medical Society was received with interest. Three members of the committee were present, including Ross Fowler, chairman, Lewis Hyatt, and Kemal Kutait. Each member discussed the committee's activity thoroughly. The Committee urges the members of the Medical Society to provide guidance and voluntary support in increasing medical manpower throughout the State. The report is as follows:

The Medical School Committee of the Arkansas Medical Society respectfully submits the following report:

Four members of the Medical School Committee, Doctors Kutait, Hyatt, Crow and Fowler, chairman, met with six heads of departments of the Medical School, Doctors Campbell, Barclay, Reese, Bost, Abernathy, Tudor and Dean Shorey at the Medical Center, March 14, 1971.

Health manpower and health care in Arkansas were discussed with all agreeing to the critical shortage of physicians in the rural areas. Fifty-five percent of Arkansas physicians are in five urban counties and only 11% of recent graduates have gone to towns of under 10,000 population. Conditions accounting for nearly 90% of graduates going into specialties, research, and teaching were discussed. Instructor influence, choice of students, optional preceptorship and an elective course of study in the senior year received attention. Decrease in academic requirements, discontinuing vacations, admitting more students and making the Medical School a three-year course were considered as possible ways of producing more physicians.

It was agreed that the Medical Center was capable of graduating competent, confident, and qualified medical practitioners of any type desired, that they had the best students, faculty and

facilities they have ever had, but that more money and facilities were needed for expansion.

It was discussed that improving the educational, cultural, social, economic, recreational and psychological conditions along with improved health facilities would enhance the chances of obtaining more rural physicians.

Governor Bumpers' interest in rural health was discussed and he or a representative of his office will be invited to the Committee's next meeting, scheduled as a breakfast meeting at the Annual Medical Society meeting at Hot Springs.

Mr. Speaker, I move acceptance of this report as presented by the committee.

Dr. Fowler, chairman of the Medical School Committee, offered as a matter of information the fact that the meeting scheduled for April 25th had to be cancelled.

Upon the motion of Winston Shorey and Kemal Kutait, the House voted to insert the words "from throughout the whole country" in the third sentence of the third paragraph of the report, so that it would read . . . "Conditions accounting for nearly 90% of graduates from throughout the whole country going into specialties, research, and teaching were discussed". Dean Shorey stated that twenty-five to thirty percent of Arkansas graduates are going into general practice although not necessarily in Arkansas. This portion of the reference committee report was accepted as amended by the above motion.

The Union County resolutions, as presented, were discussed with members of the Union County Medical Society and our committee recommended that a more specifically worded resolution be presented to the Council of the Arkansas Medical Society at its next meeting. The representatives agreed to this recommendation. (Please see page 30-33 of this issue for copies of the resolutions).

There was considerable discussion regarding the Union County resolutions. Upon the motion of F. R. Buchanan and Jacob Ellis, the House voted to return the resolutions to Union County Medical Society with instructions to prepare a brief itemized resolution in consultation with the Society's attorney as to whether or not a void of ethics exists and, if so, what is necessary for cor-

rection; such resolution to be presented to the House of Delegates at its next meeting.

Our committee considered a resolution of the Miller County Society requesting that non-medical costs be properly identified by itemization and appropriate charges as noted. The resolution is as follows:

WHEREAS, physicians are receiving unfavorable and often unfair publicity because of the rising cost of medical care, and

WHEREAS, most of the increased cost of practicing medicine results from services only indirectly related to patient care, and

WHEREAS, the volume of insurance and other third-party claim forms has increased to an expensive and burdensome load, and

WHEREAS, many physicians are covering the costs of these ancillary services in their charges for patient care, and

WHEREAS, organized medicine has repeatedly taken a stand in opposition to hidden charges and incorrectly assigned costs,

NOW, THEREFORE, BE IT RESOLVED that the Arkansas Medical Society encourage its members to identify these and other non-medical costs properly by itemization and appropriate charges.

The Reference Committee recommends that this resolution be approved and transmitted to the Judicial Council of the American Medical Association and I so move. Upon second by Long, the House so voted.

It was noted by some of the members of the Society in attendance at the Reference Committee meeting that a non-medical representative of one of the insurance carriers was present at the Reference Committee meeting. The feeling was expressed that non-members of the Medical Society should not be present at meetings of the reference committees except by invitation.

Mr. Speaker, I move approval of the entire report of Reference Committee # 3 as amended. It was so ordered.

The Speaker expressed appreciation to the members of Reference Committee # 3.

Speaker Chudy called for the supplementary report of the Council.

REPORT OF THE COUNCIL

C. C. Long, Chairman

The Council met on Sunday, April 25th, and transacted the following business:

- 1. Received notice that Mr. Paul Berry is leaving the employment of the Arkansas Medical Society effective April 30th. Mr. Berry will join Senator McClellan's staff and goes to his new position with the best wishes of the Arkansas Medical Society.
- 2. Approved the following applications for dues exemption:

LIFE MEMBERSHIP

William A. Hudson, Jasper	Boone County
DeVaux L. Owens, Harrison	Boone County
Curtis W. Jones, Sr., Benton	Saline County
W. R. Brooksher, Fort Smith	Sebastian County
M. H. Scott, Fort Smith	Sebastian County

AFFILIATE MEMBERSHIP

Retirement

Albert B. Dickey	Lawrence County
Hamilton K. Carrington	Columbia County
Robert R. Kirkpatrick	Miller County
Reavis W. Pickett	Miller County
William K. Bell	Craighead-Poinsett County
R. C. Shanlever	Craighead-Poinsett County
Martin F. Heidgen	Pope-Yell County
William L. McNamara	Pope-Yell County
Firgil N. Kennedy	Sebastian County
Charles C. Ault	Pulaski County
Rupert M. Blakely	Pulaski County
Martha M. Brown	Pulaski County
Alan G. Cazort	Pulaski County
Hoyt L. Choate	Pulaski County
Ellis P. Cope	Pulaski County
Eva F. Dodge	Pulaski County
Ruth H. Junkin	Pulaski County
Harold N. Miller	Pulaski County
James M. Nisbett	Pulaski County
N. W. Riegler, Sr.	Pulaski County
Carl A. Rosenbaum	Pulaski County
W. A. Snodgrass, Jr.	Pulaski County
Irving Spitzberg	Pulaski County
John M. Stathakis	Pulaski County
Charles Wallis	Pulaski County
Arthur M. Washburn	Pulaski County
Clarence F. Watson	Pulaski County
Jeff J. Baggett	Washington County
H. L. Boyer	Washington County
Charles M. Brizzolara	Washington County
Joseph P. DeLaney	Washington County

Howell E. Leming	Washington County
Vincent O. Lesh	Washington County
Lawrence H. Siegel	Washington County
Ross Van Pelt	Washington County
Joe T. Polk	Mississippi County
Eustis J. Chaffin	St. Francis County
A. J. Dunklin	White County
M. C. Hawkins, Jr.	White County
James D. Kinley	White County
Sloan M. Sanford	White County

Disability

Raymond E. Buirge	Baxter County
Benjamin F. Banister	Faulkner County
Horace H. Holt	Howard-Pike County
Harry E. McEntire	Lonoke County
Hoyt R. Allen	Pulaski County
Daniel H. Antry	Pulaski County
Bryce Cummins	Pulaski County
Calvin A. Churchlill	Independence County
Hunter C. Sims, Sr.	Mississippi County
Dewey W. Sloan	White County

Prolonged Illness

Thomas P. Foltz	Sebastian County
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AFFILIATE MEMBERSHIP FOR
INTERNS AND RESIDENTS

John M. Grasse, Jr.	Baxter County
Willis M. Stevens, Jr.	Union County
Joe C. Parker	Washington County
Gerald W. Johnson	Ashley County
Bill J. Jordan	Ashley County
Gailier C. Johnston	Chicot County
John A. Baldridge	Pulaski County
David S. Bevans	Pulaski County
Raymond V. Biondo	Pulaski County
Robert W. Hunter	Pulaski County
Charles Ledbetter	Pulaski County
Jerry L. Thomas	Pulaski County
Charles F. Safley, Jr.	Pulaski County
Wilbur M. Giles	Pulaski County
Kenneth Meacham	Pulaski County
J. D. McConnell	Pulaski County
Loverd M. Peacock	Pulaski County
Don Setliff	Pulaski County
James S. Beckman	Pulaski County
John S. Duncan	Saline County

MILITARY MEMBERS

Wallace A. Thomas	Chicot County
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- 3. Heard an explanation by legal counsel that it is not possible to file a suit in Federal court to force the Federal Government to rescind its order lowering fees to the 75th percentile as suggested by one of the members.
- 4. Approved Mr. Warren's letter to the Union County Medical Society explaining the rea-

sons no action had been taken on the Union County 1970 resolution having to do with medical ethics and third party payments.

5. Nominated the following men to serve terms on the Professional Standards Review Organization beginning May 1, 1971:

Allergy: Purcell Smith, Little Rock

Dermatology: A. C. Bradford, Fort Smith

Ophthalmology: James L. Smith, Little Rock

Otolaryngology: E. L. Milner, Little Rock

Radiology: W. J. Rhinehart, Little Rock

Surgery: Wright Hawkins, Fort Smith

6. Appointed the following men to serve one-year terms on the Board of Ark-Pac:

James Armstrong, Ashdown

A. C. Bradford, Fort Smith

James Mashburn, Fayetteville

Asa Crow, Paragould

Ross Fowler, Harrison

F. M. Henderson, Pine Bluff

Karlton Kemp, Texarkana

T. E. Townsend, Pine Bluff

Paul A. Wallick, Monticello

William S. Orr, Jr., Little Rock

Mrs. C. Lynn Harris, Hope

Mrs. W. Payton Kolb, Little Rock

7. Nominated Dr. Fred C. Inman, Jr., of Carlisle for a term on the Arbitration Commission.
8. Nominated Dr. James Weber of Jacksonville for a position on the Blue Cross-Blue Shield Board of Trustees.
9. Nominated Dr. Jean Gladden of Harrison to succeed himself on the Board of Trustees of the Medical Education Foundation for Arkansas.
10. Received for information the Pulaski County resolution recommending the publication of a roster with photographs of all members.

The Council met on Monday, April 26, and transacted the following business:

1. Heard a lengthy discussion on participation in experimental health delivery systems as proposed by a branch of the Department of Health, Education and Welfare.

The Council met on Tuesday, April 27, and transacted the following business:

1. Nominated Dr. William M. Wells of Heber Springs for a position on the Arbitration Commission.

2. Decided to publish a summary of the new drug regulations in an early issue of the Journal of the Arkansas Medical Society.
3. Voted to request Mr. Warren to summarize the laws enacted in the 1971 Arkansas Legislature for publication in the Journal.
4. Discussed the necessity for interesting physicians in keeping abreast of political developments in an effort to prevent continuing incursions in the practice of medicine by osteopaths, optometrists, chiropractors, Medicare and others.

The Council met on Wednesday, April 28th, and transacted the following business:

1. Heard Mr. Sam McGuire, president of the Arkansas Chapter of the Student American Medical Association, discuss his plans for the coming year.
2. Adopted a resolution commending Dr. John Herron for his work as State Health Officer.

RESOLUTION RE: Dr. John T. Herron

WHEREAS, John T. Herron, M.D., has served faithfully as the State Health Officer for over twenty years and has been an employee of the Arkansas State Health Department for thirty-two years, and

WHEREAS, his primary interest has always been the health and welfare of the people of this State despite pressures from other interests, and

WHEREAS, he has always endeavored to maintain his department above partisan politics in the interest of all the people of Arkansas, and

WHEREAS, his integrity has at all time been above reproach, and he has dedicated himself to the public health of this State,

NOW THEREFORE, BE IT RESOLVED, that the Arkansas Medical Society support his continuance in his position as State Health Officer, and

BE IT FURTHER RESOLVED that this resolution be forwarded to the Governor of the State of Arkansas, to the State Board of Health, and a copy to Dr. Herron.

3. Appointed a committee to work with the State Board of Health to maintain the sanitation and health standards of Arkansas.
4. Adopted resolutions of appreciation to all who helped to make this meeting a success.

Upon the motion of Long and Millard, the House approved the supplemental report of the Council.

Speaker Chudy called for the report of the Resolutions Committee. It was presented as follows:

REPORT OF THE RESOLUTIONS COMMITTEE

A. S. Koenig, Chairman

The resolutions committee proposes the following resolutions:

RESOLUTION OF APPRECIATION

WHEREAS, the 95th Annual Session of the Arkansas Medical Society, just completed in Hot Springs, has been an outstanding success; and

WHEREAS, the management of the Arlington Hotel has facilitated our efforts in every way in providing meeting rooms, projection equipment, and otherwise assisting in arrangements for our meeting; and

WHEREAS, the hours of thought devoted by Dr. Winston K. Shorey and his Committee on Arrangements have resulted in an outstanding program by members of faculty of the University of Arkansas School of Medicine and distinguished guest speakers from out of State; and

WHEREAS, the members of the Med Dames organization have been most helpful in serving as pages for the scientific sessions; and

WHEREAS, the fourth councilor district—Drs. Wayne Lazenby and Raymond Irwin and the individual members thereof—have been gracious hosts, and have contributed greatly to our enjoyment; and

WHEREAS, the management of the Belvedere Country Club has been most gracious in making its golf course available for the golf tournament; and

WHEREAS, the commercial and scientific exhibits were of great benefit to our gathering and the courteous and careful attention of the attendants was quite helpful; and

WHEREAS, the members of Ark-Pac were most gracious in furnishing the hospitality bar; and

WHEREAS, the Vapors Supper Club made its facilities available to our group; and

WHEREAS, the Woman's Auxiliary contributed greatly through their diligence, attendance and inspiration;

NOW THEREFORE, BE IT RESOLVED, that the Arkansas Medical Society records its sincere appreciation and expresses its heartfelt thanks to our host city, and those heretofore mentioned, for the cordial welcome, the extension of unbounded hospitality, the expression of good will and kindly feelings shown each member of the Society, who has been privileged to attend this session. We shall ever hold in pleasant memory the hours spent as their guests during the last several days.

RESOLUTION OF APPRECIATION: NEWS MEDIA

WHEREAS, the 95th Annual Session of the Arkansas Medical Society, just completed in Hot Springs, has been an outstanding success, and

WHEREAS, the television stations, newspapers and radio stations of the State have made available to the Medical Society extended coverage of its meetings;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates expresses its thanks for the Medical Society to the news media.

RESOLUTION OF APPRECIATION: MEDICAL ASSISTANTS

WHEREAS, the Arkansas State Medical Assistants Society has been most kind and generous in serving coffee and doughnuts to the members of the Society attending this 95th Annual Session; and

WHEREAS, the coffee bar has added much to the success of the meeting; and

WHEREAS, the medical assistants have demonstrated their support and dedication to the purposes of organized medicine;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates of the Arkansas Medical Society expresses its thanks and appreciation to the Medical Assistants Society and to its representatives who have been so gracious to us during the last several days.

RESOLUTION RE: BLUE CROSS-BLUE SHIELD

WHEREAS, the 95th Annual Session of the Arkansas Medical Society, just completed in Hot Springs, has been an outstanding success; and

WHEREAS, Arkansas Blue Cross-Blue Shield has been most kind and generous in hosting a cocktail party for the membership;

NOW THEREFORE, BE IT RESOLVED that the Arkansas Medical Society expresses its thanks and appreciation to Arkansas Blue Cross-Blue Shield and to its representatives who have been so gracious to us.

RESOLUTION RE: HILDEGARDE

WHEREAS, the 95th Annual Session of the Arkansas Medical Society, just completed in Hot Springs, has been an outstanding success; and

WHEREAS, entertainment by Hildegard at the Inaugural Banquet has contributed greatly to our enjoyment, and

WHEREAS, Mountain Valley Water Company has made Hildegard available to entertain the Medical Society as part of the celebration of the firm's centennial year;

NOW, THEREFORE, BE IT RESOLVED that the Arkansas Medical Society expresses its sincere appreciation and heartfelt thanks to Hildegard and to Mountain Valley Water Company for their contributions to the success of the Society's convention.

The resolutions were unanimously adopted by the House of Delegates.

Speaker Chudy announced that the following nominees for the State Board of Health positions had been selected by congressional district elections:

Third District:

Ben N. Saltzman, Mountain Home
Roy I. Millard, Russellville
John W. Dorman, Springdale

Sixth District:

C. Lewis Hyatt, Monticello
Guy U. Robinson, Dumas
Robert H. White, Malvern

Speaker Chudy asked for nominations from the floor; hearing none, he declared the nominees accepted as submitted by district elections.

T. E. Burrow of Garland County extended an invitation to the Society to return to Hot Springs for the Society's 1973 Annual Session.

John Satterfield spoke briefly regarding the Arkansas Caduceus Club, which is the University of Arkansas School of Medicine Alumni Association. He mentioned the services which the Club provides for the alumni of the Medical School:

1. Plans reunion meetings to coincide with commencement for all classes at five year intervals;
2. Homecoming weekend for all alumni planned for the fall to coincide with a football game;

Both of these meetings have a brief scientific program which is approved for credit by the American Academy of General Practice.

The Club plans to mail a newsletter on a monthly basis (with exception of summer months). All these functions require funds and Dr. Satterfield expressed the hope that all alumni would join the "Dollar a Year" Club (contribution of a dollar a year for every year that a person has been out of Medical School). He asked that anyone interested in working with the Caduceus Club contact him at 500 South University, Little Rock, or the Caduceus Club office at the Medical Center.

The House adjourned at 12:03 P.M.

**REORGANIZATIONAL MEETING
OF THE COUNCIL**

Immediately following adjournment of the House of Delegates, the Council held a brief meeting to reorganize. C. C. Long was re-elected chairman of the Council and Alfred Kahn, Jr., was re-elected editor of the Journal.

The Council voted to suggest to Dr. Kahn that he appoint sub-editors from the specialty groups to assist with the Journal.

CONVENTION REGISTRATION

Physicians	458
Medical Students	30
Medical Assistants, Nurses, Technicians, etc.	24
Scientific Exhibitors	19
Commercial Exhibitors	119
Auxiliary	12
Others	40
—	702

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY 1971-1972

President	Stanley Applegate, 220 Meadow Avenue, Springdale 72764
President-elect	Robert Watson, Donaghey Building, Little Rock 72201
First Vice President	Winston K. Shorey, 4301 West Markham, Little Rock 72205
Second Vice President	Lee B. Parker, 241 West Spring, Fayetteville 72701
Third Vice President	Roy I. Millard, 3005 W. Main Place, Russellville 72801
Secretary	Elvin Shuffield, 1000 Wolfe, Little Rock 72202
Secretary Emeritus	W. R. Brooksher, Box 3096, Fort Smith 72901
Treasurer	Ben N. Saltzman, 126 West Sixth, Mountain Home 72653
Speaker, House of Delegates	Amail Chudy, 1801 Maple, North Little Rock 72114
Vice Speaker of House	Charles Wilkins, 3005 W. Main Place, Russellville 72801
Journal Editor	Alfred Kahn, Jr., 1300 West Sixth, Little Rock 72201
Delegates to AMA	C. C. Long, 110 West Commercial, Ozark 72949 Purcell Smith, 4001 West Capitol, Little Rock 72205
Alternates	Joe Verser, P. O. Box 106, Harrisburg 72432 T. E. Townsend, 1310 Cherry, Pine Bluff 71601
Executive Vice President	Mr. Paul C. Schaefer, P.O. Box 1208, Fort Smith 72901

EXECUTIVE COMMITTEE OF THE COUNCIL

Chairman of the Council	C. C. Long, 110 West Commercial, Ozark 72949
President	Stanley Applegate, 220 Meadow Avenue, Springdale 72764
President-elect	Robert Watson, Donaghey Building, Little Rock 72201
Secretary	Elvin Shuffield, 1000 Wolfe, Little Rock 72202

COUNCILORS

District	Councilor Term Expires '72	Councilor Term Expires '73	Counties in District
1.	Bascom P. Raney 403 East Matthews Jonesboro 72401	Eldon Fairley P. O. Box 71 Osceola 72370	Clay, Craighead, Crittenden, Fulton, Greene, Lawrence, Mississippi, Poinsett, Randolph and Sharp
2.	Hugh R. Edwards 607 Woodruff Searcy 72143	Paul Gray P. O. Box 82 Batesville 72501	Cleburne, Conway, Faulkner, Independence, Izard, Jackson, Stone and White
3.	L. J. P. Bell 626 Poplar Helena 72342	Dwight W. Gray 110 W. Chestnut Marianna 72360	Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff
4.	Wayne Lazenby 145 W. Waterman Dumas 71639	Raymond Irwin 1421 Cherry Pine Bluff 71601	Ashley, Chicot, Desha, Drew, Jefferson and Lincoln
5.	George F. Wynne 113 West Cypress Warren 71671	Kenneth R. Duzan 443 West Oak El Dorado 71730	Bradley, Calhoun, Cleveland, Columbia, Dallas, Ouachita and Union
6.	C. Lynn Harris 820 South Main Hope 71801	Karlton H. Kemp 408 Hazel Texarkana 75501	Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Pike, Polk and Sevier
7.	Robert F. McCrary 505 West Grand Hot Springs 71901	James C. Bethel 221 East Sevier Benton 72015	Clark, Garland, Grant, Hot Spring, Montgomery and Saline
8.	William S. Orr St. Vincent Inf. Little Rock 72201	W. Payton Kolb 1120 Marshall Little Rock 72202	Pulaski
9.	Henry V. Kirby 216 North Walnut Harrison 72601	Morris Henry 204 South East Fayetteville 72701	Baxter, Benton, Boone, Carroll, Madison, Marion, Newton, Searcy, Van Buren and Washington
10.	A. S. Koenig 922 Lexington Fort Smith 72901	C. C. Long 110 W. Commercial Ozark 72949	Crawford, Franklin, Johnson, Logan, Perry, Pope, Scott, Sebastian and Yell

1971 OFFICERS – COUNTY MEDICAL SOCIETIES

ARKANSAS MEDICAL SOCIETY

ARKANSAS.....	Pres.—E. A. McCracken, 509 South Main, Stuttgart 72160 Secy.—Paul H. Millar, Route 1, Box 21-D, Stuttgart 72160
ASHLEY.....	Pres.—D. L. Toon, 310 North Alabama, Crossett 71635 Secy.—Frederick N. Burt, 113 Pine Street, Crossett 71635
BAXTER.....	Pres.—John W. Sneed, Jr., 613 South Street, Mountain Home 72653 Secy.—Ben N. Saltzman, 126 West 6th, Mountain Home 72653
BENTON.....	Pres.—Donald L. Cohagan, Box 66, Bentonville 72712 Secy.—John A. Rollow, Highway 71 North, Bentonville 72712
BOONE.....	Pres.—Lindell M. Kinman, P. O. Box 404, Harrison 72601 Secy.—David Martin, P.O. Box 1095, Harrison 72601
BRADLEY.....	Pres.—George F. Wynne, 113 West Cypress, Warren 71671 Secy.—W. C. Whaley, 203 East Church, Warren 71671
CHICOT.....	Pres.—H. W. Thomas, 105 North Freeman, Dermott 71638 Secy.—Major E. Smith, 101 West Peddicord, Dermott 71638
CLARK.....	Pres.—George R. Peebles, 305 East Main, Gurdon 71743 Secy.—James T. Blackmon, 1008 Pine, Arkadelphia 71923
CLEBURNE.....	Pres.—W. Wayne Smith, 109 West Main, Heber Springs 72543 Secy.—D. H. McClanahan, 4th and Searcy Streets, Heber Springs 72543
COLUMBIA.....	Pres.—Ronald L. Baldwin, 110 West North, Magnolia 71753 Secy.—Charles H. Weber, 110 West North, Magnolia 71753
CONWAY.....	Pres.—William H. Siddon, P. O. Box 587, Morrilton 72110 Secy.—Thomas L. Buchanan, 200 South Moose, Morrilton 72110
CRAIGHEAD-POINSETT.....	Pres.—Owen H. Clopton, P. O. Box 1326, Jonesboro 72401 Secy.—James M. Robinette, 923 Union, Jonesboro 72401
CRAWFORD.....	Pres.—L. R. Darden, Box 623, Van Buren 72956 Secy.—Jack N. Thicksten, 164 Fayetteville, Alma 72921
CRITTENDEN.....	Pres.—H. G. Lanford, 308 South Rhodes, West Memphis 72301 Secy.—Keith B. Kennedy, 316 Tyler, West Memphis 72301
CROSS.....	Pres.—Robert A. Hayes, 411 South State, Wynne 72396 Secy.—James R. Jacobs, P. O. Box E, Wynne 72396
DALLAS.....	Pres.—Jack T. Dobson, 110 North Clifton, Fordyce 71742 Secy.—John H. Delamore, P. O. Box 351, Fordyce 71742
DESHA.....	Pres.—O. G. Blackwell, 145 West Waterman, Dumas 71639 Secy.—Howard R. Harris, 207 South Elm, Dumas 71639
DREW.....	Pres.—Paul A. Wallick, 216 South Main, Monticello 71655 Secy.—A. K. Busby, 816 North Hyatt, Monticello 71655
FAULKNER.....	Pres.—Fred Gordy, 552 Locust, Conway 72032 Secy.—Bob G. Banister, 1300 North Parkway, Conway 72032

PROCEEDINGS

FRANKLIN	Pres.—C. C. Long, 110 West Commercial, Ozark 72949 Secy.—David L. Gibbons, 506 West Commercial, Ozark 72949
GARLAND	Pres.—L. O. Bohnen, 236 Central, Hot Springs 71901 Secy.—Patrick L. Knight, 236 Central, Hot Springs 71901
GRANT	Pres.—Curtis B. Clark, 200 South Rose, Sheridan 72150 Secy.—Clyde D. Paulk, 200 South Rose, Sheridan 72150
GREENE-CLAY	Pres.—Richard O. Martin, P. O. Box 339, Paragould 72450 Secy.—Jack G. Richmond, P. O. Box 339, Paragould 72450
HEMPSTEAD	Pres.—George H. Wright, 420 East 2nd, Hope 71801 Secy.—C. Lynn Harris, 820 South Main, Hope 71801
HOT SPRING	Pres.—John A. Vaughan, 115 E. Highland, Malvern 72104 Secy.—Robert H. White, 1004 Dyer, Malvern 72104
HOWARD-PIKE	Pres.—M. H. Wilmoth, 14th and Leslie, Nashville 71852 Secy.—M. H. Wilmoth, 14th and Leslie, Nashville 71852
INDEPENDENCE	Pres.—Troy Raney, Medical Clinic, Cave City 72521 Secy.—Lackey G. Moody, 377 East Main, Batesville 72501
JACKSON	Pres.—Jerry M. Frankum, Second and Laurel, Newport 72112 Secy.—John D. Ashley, Second and Laurel, Newport 72112
JEFFERSON	Pres.—A. G. Sullenberger, 1726 W. 42nd, Pine Bluff 71601 Secy.—C. M. Rittelmeyer, 1716 West 42nd, Pine Bluff 71601
JOHNSON	Pres.—Clyde H. Underwood, P. O. Box 350, Clarksville 72830 Secy.—Robert H. Manley, P. O. Box 378, Clarksville 72830
LAFAYETTE	Pres.—R. H. Harrison, Lewisville 71815 Secy.—W. J. Lee, Box 276, Stamps 71860
LAWRENCE	Pres.—J. B. Elders, 321 Southwest Third, Walnut Ridge 72476 Secy.—J. B. Elders, 321 Southwest Third, Walnut Ridge 72476
LEE	Pres.—Dwight W. Gray, 110 West Chestnut, Marianna 72360 Secy.—F. S. Dozier, 29 North Poplar, Marianna 72360
LINCOLN	Pres.—James W. Freeland, Box 608, Star City 71667 Secy.—Richard C. Petty, Box 580, Star City 71667
LITTLE RIVER	Pres.—James D. Armstrong, P. O. Box 397, Ashdown 71822 Secy.—Joseph G. Shelton, Jr., P. O. Box 397, Ashdown 71822
LOGAN	Pres.—Rowland R. Robins, State Sanatorium, Booneville 72927 Secy.—James T. Smith, 710 North Express, Paris 72855
LONOKE	Pres.—Willie R. Harris, England Hospital, England 72046 Secy.—B. E. Holmes, 305 West Front, Lonoke 72086
MILLER	Pres.—Karlton H. Kemp, 408 Hazel, Texarkana 75501 Secy.—Robert H. Chappell, P. O. Box 1288, Texarkana 75501 Exec. Secy.—Mrs. Marilyn Pryor, P. O. Box 1843, Texarkana 75501
MISSISSIPPI	Pres.—Sybil R. Hart, Chickasawba Hospital, Blytheville 72315 Secy.—Eldon Fairley, P. O. Box 71, Osceola 72370

PROCEEDINGS

MONROE.....	Pres.—W. L. Walker, 114 South New Orleans, Brinkley 72021 Secy.—J. P. Williams, Jr., 127 South New Orleans, Brinkley 72021
NEVADA.....	Pres.—Charles D. Avery, 427 East 6th, Prescott 71857 Secy.—H. Blake Crow, 327 East 2nd, Prescott 71857
OUACHITA.....	Pres.—Tom J. Meek, 415 Hospital Drive, S.W., Camden 71701 Secy.—L. V. Ozment, 530 Jefferson, S.W., Camden 71701
PHILLIPS.....	Pres.—C. M. T. Kirkman, 1105 Perry, Helena 72342 Secy.—William W. Biggs, Helena Hospital, Helena 72342
POLK.....	Pres.—David P. Hefner, 518 Janssen, Mena 71953 Secy.—Henry N. Rogers, 600 West 7th, Mena 71953
POPE-YELL.....	Pres.—Joseph A. Gardner, 3005 West Main Place, Russellville 72801 Secy.—W. E. King, Jr., 3005 West Main Place, Russellville 72801
PULASKI.....	Pres.—James L. Smith, 623 Woodlane, Little Rock 72201 Secy.—Amail Chudy, 1801 Maple, North Little Rock 72114 Exec. Secy.—Mr. Paul Harris, Univ. Tower Bldg., Little Rock 72204
RANDOLPH.....	Pres.—James J. Wyllie, 309 West Broadway, Pocahontas 72455 Secy.—Albert L. Baltz, 110 West Broadway, Pocahontas 72455
SALINE.....	Pres.—John W. Ashby, 302 West South, Benton 72015 Secy.—James C. Bethel, 221 East Sevier, Benton 72015
SCOTT.....	Pres.—Harold B. Wright, Box 249, Waldron 72958 Secy.—Harold B. Wright, Box 249, Waldron 72958
SEARCY.....	Pres.—John H. Williams, P. O. Box 177, Marshall 72650 Secy.—John A. Hall, 302 East Main, Clinton 72031
SEBASTIAN.....	Pres.—E. A. Mendelsohn, 1500 Dodson, Fort Smith 72901 Secy.—McDonald Poe, Jr., 320 North Greenwood, Fort Smith 72901 Asst. Secy.—Mrs. Jackie Boyd, c/o Sparks Hosp., Fort Smith 72901
SEVIER.....	Pres.—Rodger C. Dickinson, 302 North 4th, DeQueen 71832 Treas.—C. F. Shukers, II, 302 North 4th, DeQueen 71832 Exec. Secy.—Mr. Walter E. Cox, DeQueen Clinic, Hwy. 70 West, DeQueen
ST. FRANCIS.....	Pres.—A. M. Bradley, P. O. Box 70, Forrest City 72335 Secy.—Patricia C. Davis, P. O. Box 4000, Forrest City 72335
UNION.....	Pres.—Grady E. Hill, Jr., 615 W. Grove, El Dorado 71730 Secy.—Dorothy C. Sample, 427 W. Oak, El Dorado 71730
WASHINGTON.....	Pres.—Wilbur G. Lawson, 207 East Dickson, Fayetteville 72701 Secy.—Robert H. McCollum, 102 West Dickson, Fayetteville 72701
WHITE.....	Pres.—C. W. Jackson, P. O. Box C, Judsonia 72081 Secy. Hugh R. Edwards, 607 Woodruff, Searcy 72143
WOODRUFF.....	Pres.—B. E. Hendrixson, 306 East Third, McCrory 72101 Secy.—James E. Rowe, 306 East Third, McCrory 72101

COMMITTEES – ARKANSAS MEDICAL SOCIETY – 1971-72

	Term Expires		Term Expires
COMMITTEE ON CANCER CONTROL		Ben N. Saltzman, 126 West Sixth, Mountain Home 72653— <i>CHAIRMAN</i>	1973
Jean C. Gladden, 651 North Spring, Harrison 72601	1972	Bryant S. Swindoll, 4815 West Markham, Little Rock 72205	1973
Glenn P. Schoettle, 308 South Rhodes, West Memphis 72301	1972	SUB-COMMITTEE ON MATERNAL AND CHILD WELFARE	
Frank G. Kumpuris, 415 North University, Little Rock 72205— <i>CHAIRMAN</i>	1973	John W. Trieschmann, 236 Woodbine, Hot Springs 71901— <i>CHAIRMAN</i>	1974
Charles R. Henry, 500 South University, Little Rock 72205	1973	James W. Burnett, 414 Hazel, Texarkana 75501	1972
Robert L. McDonald, P. O. Box 7863, Pine Bluff 71601	1974	Dale Briggs, 1210 Look, Little Rock 72204	1973
Harmon Lushbaugh, Colonial Village, Highway 71 North, Fayetteville 72701	1974	Vacancy	1974
COMMITTEE ON MEDICAL LEGISLATION		SUB-COMMITTEE ON TUBERCULOSIS	
Elvin Shuffield, 1000 Wolfe, Little Rock 72202— <i>CHAIRMAN</i>	1972	C. Clyde Tracy, 1421 Cherry, Pine Bluff 71601	1974
Joe Verser, P. O. Box 106, Harrisburg 72132	1972	Harley C. Darnall, 211-D North Greenwood, Fort Smith 72901— <i>CHAIRMAN</i>	1972
William A. Snodgrass, Jr., 8A Quapaw Tower Apts., Little Rock 72202	1972	Kenneth A. Siler, 651 North Spring, Harrison 72601	1972
W. Payton Kolb, 1120 Marshall, Little Rock 72202	1973	L. J. Pat Bell, 626 Poplar, Helena 72342	1973
Martin Eisele, 101 Whittington, Hot Springs 71901	1973	Robert M. Franklin, 3005 West Main Place, Russellville 72801	1973
Robert Watson, Donaghey Building, Little Rock 72201	1973	John P. Wood, 907 Mena, Mena 71953	1974
James Mashburn, 207 E. Dickson, Fayetteville 72701	1974	COMMITTEE ON AGING	
Robert F. McCrary, 505 W. Grand, Hot Springs 71901	1974	John F. Guenther, 126 West Sixth, Mountain Home 72653	1974
Henry A. Crane, Jr., 1107 Cherry, Pine Bluff 71601	1974	Joseph A. Norton, 8570 Cantrell Road, Little Rock 72207	1972
SUB-COMMITTEE ON NATIONAL LEGISLATION		Bill D. Stewart, 415 North University, Little Rock 72205	1973
George F. Wynne, 113 West Cypress, Warren 71671	1974	Gordon P. Oates, 1612 Maryland, Little Rock 72202— <i>CHAIRMAN</i>	1973
Dale Alford, 5700 West Markham, Little Rock 72205— <i>CHAIRMAN</i>	1974	Thomas E. Burrow, 236 Central, Hot Springs 71901	1973
Kenneth R. Duzan, 443 West Oak, El Dorado 71730	1972	Ivan H. Box, P. O. Box 218, Huntsville 72740	1974
Kemal Kutait, 1120 Lexington, Fort Smith 72901	1972	SUB-COMMITTEE ON PHYSICAL FITNESS AND SCHOOL HEALTH	
Haymond Harris, 1205 McLain, Newport 72112	1973	J. A. Harrel, Jr., Route 5, Box 615A, Little Rock 72207	1974
Vernon E. Sammons, Jr., 236 Central, Hot Springs 71901	1973	Robert H. Langston, 520 North Spring, Harrison 72601— <i>CHAIRMAN</i>	1974
COMMITTEE ON PUBLIC HEALTH		James T. Blackmon, 1008 Pine, Arkadelphia 71923	1972
Gordon P. Oates, 1612 Maryland, Little Rock 72204	1974	Francis M. Henderson, 1310 Cherry, Pine Bluff 71601	1973
Vacancy	1974	Betty A. Lowe, 101 East 5th, Texarkana 75501	1973
Wayne Lazenby, 145 West Waterman, Dumas 71639	1974	Coy C. Kaylor, 1673 North College, Fayetteville 72701	1973
Vestal B. Smith, P. O. Box 614, Marked Tree 72365	1972	SUB-COMMITTEE ON INDUSTRIAL HEALTH	
Omer E. Bradsher, 901 West Kingshighway, Paragould 72450	1972	Kemal Kutait, 1120 Lexington, Fort Smith 72901	1974
		James C. Bethel, 221 East Sevier, Benton 72015	1974
		Gerald K. Patton, 100 North 16th, Fort Smith 72901	1972
		William L. Steele, 5520 West Markham, Little Rock 72205	1972

PROCEEDINGS

	Term Expires		Term Expires
Roy I. Millard, 3005 West Main Place, Russellville 72801— <i>CHAIRMAN</i>	1973	COMMITTEE ON MEDICAL EDUCATION	
H. Blake Crow, 327 East 2nd, Prescott 71857	1973	Winston K. Shorey, 4301 West Markham, Little Rock 72205	1974
COMMITTEE ON MENTAL HEALTH		Marlin B. Hoge, 314 North Greenwood, Fort Smith 72901	1972
William G. Reese, 4301 West Markham, Little Rock 72205	1972	W. H. Calaway, North Arkansas Clinic, Batesville 72501	1972
W. Payton Kolb, 1120 Marshall, Little Rock 72202	1972	John L. Ruff, 104 Hospital Road, Magnolia 71753	1973
Robert H. Whitehead, Jr., Donaghey Building, Little Rock 72201	1972	Lee B. Parker, Jr., 241 West Spring, Fayetteville 72701	1973
William O. Young, Donaghey Building, Little Rock 72201— <i>CHAIRMAN</i>	1973	C. Lewis Hvatt, 515 N. Main, Monticello 71655— <i>CHAIRMAN</i>	1974
H. D. Luck, 908 Main, Arkadelphia 71923	1973	COMMITTEE ON CONTINUING EDUCATION	
Richard C. Petty, P. O. Box 580, Star City 71667	1973	James S. Taylor, 4301 West Markham, Little Rock 72205	1974
Frederick D. Jarvis, Jr., 1031 N. College, Fayetteville 72701	1974	Lee B. Parker, 241 West Spring, Fayetteville 72701— <i>CHAIRMAN</i>	1974
Donald S. Chambers, 918 Lexington, Fort Smith 72901	1974	T. A. Feild, III, 3600 North "O" Street, Fort Smith 72901	1974
IMMUNIZATION SUB-COMMITTEE		Bobby E. McKee, 505 East Matthews, Jonesboro 72401	1974
Wilbur G. Lawson, 207 East Dickson, Fayetteville 72701— <i>CHAIRMAN</i>	1974	George F. Wynne, 113 West Cypress, Warren 71671	1972
Howard R. Harris, 207 South Elm, Dumas 71639	1974	Claude F. Peters, 1420 Potts, Malvern 72104	1973
Joseph L. Rosenzweig, 236 Woodbine, Hot Springs 71901	1972	C. Lynn Harris, 820 S. Main, Hope 71801	1973
Thomas E. Townsend, 1310 Cherry, Pine Bluff 71601	1972	Paul Wallick, 216 S. Main, Monticello 71655	1973
Vida H. Gordon, 4301 West Markham, Little Rock 72205	1973	Vance J. Crain, 303 East Union, Wynne 72396	1973
Charles E. Kemp, 809 Cobb, Jonesboro 72401	1973	Porter R. Rodgers, Jr., 403 E. Lincoln, Searcy 72143	1973
SUB-COMMITTEE ON TRAFFIC SAFETY		COMMITTEE ON HOSPITALS	
Lonnie R. Turney, Second and Pine, McGehee 71654	1974	Wright Hawkins, 100 South 14th, Fort Smith 72901	1972
Louise M. Henry, 204 South East Street, Fayetteville 72701	1972	Haymond Harris, 1205 McLain, Newport 72112	1972
James G. Stuckey, Jr., 500 South University, Little Rock 72205	1972	Art B. Martin, 1500 Dodson, Fort Smith 72901	1973
Gilbert D. Jay, III, 200 South Rhodes, West Memphis 72301	1972	George K. Mitchell, P. O. Box 2181, Little Rock 72203	1973
J. Warren Murry, 1749 North College, Fayetteville 72701	1972	Raymond A. Irwin, 1421 Cherry, Pine Bluff 71601	1974
Carl L. Williams, 522 South 16th, Fort Smith 72901— <i>CHAIRMAN</i>	1973	Edgar J. Easley, 4815 West Markham, Little Rock 72205	1974
John P. Burge, 434 South Cokley, Lake Village 71653	1973	COMMITTEE ON PUBLIC RELATIONS	
SUB-COMMITTEE ON LIAISON WITH VOCATIONAL REHABILITATION		Gordon P. Oates, 1612 Maryland, Little Rock 72202	1974
Major E. Smith, 101 East Peddicord, Dermott 71638	1974	Paul A. Wallick, 216 South Main, Monticello 71655	1974
Paul G. Henley, 700 West Faulkner, El Dorado 71730— <i>CHAIRMAN</i>	1974	A. C. Bradford, 100 South 14th, Fort Smith 72901— <i>CHAIRMAN</i>	1972
Rhys A. Williams, 651 North Spring, Harrison 72601	1972	G. Allen Robinson, 707 North Vine, Harrison 72601	1972
Robert H. Atkinson, 236 Central, Hot Springs 71901	1972	G. Thomas Jansen, 500 South University, Little Rock 72205	1973
John P. Wood, 907 Mena, Mena 71953	1973	A. S. Koenig, 922 Lexington, Fort Smith 72901	1973
H. King Wade, Jr., 231 Central, Hot Springs 71901	1973	SUB-COMMITTEE ON STATE HEALTH AND MEDICAL RESOURCES FOR CIVIL DEFENSE	
Tom P. Coker, 1673 N. College, Fayetteville 72701	1974	Kenneth R. Duzan, 443 West Oak, El Dorado 71730	1974
		Monroe D. McClain, 1120 Marshall, Little Rock 72202	1974

PROCEEDINGS

	Term Expires		Term Expires
Edgar J. Easley, 4815 West Markham, Little Rock 72205— <i>CHAIRMAN</i>	1974	C. Randolph Ellis, 1004 South Main, Malvern 72104— <i>CHAIRMAN</i>	1972
William B. Harrell, Jr., 317 State Line, Texarkana 75501	1972	John H. Miller, 415 Hospital Drive, S.W., Camden 71701	1972
Hugh R. Edwards, 607 Woodruff, Searcy 72113	1973	Carl E. Wenger, 1621 Maryland, Little Rock 72202	1973
John W. Dorman, 1203 W. Sunset, Springdale	1974	Alvin W. Strauss, Jr., 110 East 7th, Little Rock 72201	1973
Ralph Wooley, P. O. Box 7267, Pine Bluff 71601	1974	Fred O. Henker, 4301 W. Markham, Little Rock 72205	1974
ADVISORY COMMITTEE TO THE MEDICAL ASSISTANTS SOCIETY		COMMITTEE ON ARRANGEMENTS FOR ANNUAL SESSION	
George C. Burton, 427 West Oak, El Dorado 71730	1972	Joseph L. Rosenzweig, 236 Woodbine, Hot Springs 71901	1974
James D. Mashburn, 207 East Dickson, Fayetteville 72701— <i>CHAIRMAN</i>	1972	A. S. Koenig, 922 Lexington, Fort Smith 72901	1972
John L. Dedman, Jr., 415 Hospital Drive, S.W., Camden 71701	1973	Wright Hawkins, 100 South 14th, Fort Smith 72901	1972
R. H. Chappell, Box 1288, Texarkana 75501	1974	W. T. Dungan, 4301 West Markham, Little Rock 72205	1973
T. E. Townsend, 1310 Cherry, Pine Bluff 71601	1974	Dwight W. Gray, 110 West Chestnut, Marianna 72360	1972
Hunter Sims, Jr., 525 North 10th, Blytheville 72315	1974	Winston K. Shorey, 4301 West Markham, Little Rock 72205— <i>CHAIRMAN</i>	1973
COMMITTEE ON VETERANS ADMINISTRATION AFFAIRS		Gilbert S. Campbell, 4301 West Markham, Little Rock 72205	1973
Thomas W. Gray, VA Hospital, Fayetteville 72701— <i>CHAIRMAN</i>	1974	Martin Eisele, 101 Whittington, Hot Springs 71901— <i>CO-CHAIRMAN</i>	1972
Vacancy	1974	Sam G. Jameson, 532 W. Faulkner, El Dorado 71730	1974
Chalmers S. Pool, VA Hospital, North Little Rock 72114	1972	Louis R. McFarland, 211 Hobson, Hot Springs	1974
Joseph W. Ledbetter, 804 South Church, Jonesboro 72401	1973	George F. Wynne, 113 W. Cypress, Warren 71671	1974
Edgar K. Clardy, P. O. Box 850, Hot Springs 71901	1974	COUNCIL COMMITTEES	
Charles W. Silverblatt, 500 University Tower Bldg., Little Rock 72204	1974	COMMITTEE ON CONSTITUTIONAL REVISION	
COMMITTEE ON INSURANCE		Lee B. Parker, Jr., 241 West Spring, Fayetteville 72701— <i>CHAIRMAN</i>	
Charles F. Wilkins, 3005 West Main Place, Russellville 72801	1974	J. Harry Hayes, Jr., 500 South University, Little Rock 72205	
L. J. Pat Bell, 626 Poplar, Helena 72342	1974	Paul L. Rogers, P. O. Box 3096, Fort Smith 72901	
J. Harry Hayes, Jr., 500 South University, Little Rock 72205— <i>CHAIRMAN</i>	1972	H. King Wade, Jr., 231 Central, Hot Springs 71901	
T. S. Van Duyen, P. O. Box 110, Stuttgart 72160	1972	Ross E. Maynard, National Building, Pine Bluff 71601	
John D. Wright, 321 Short, Benton 72015	1973	BUDGET COMMITTEE	
James R. Weber, 1110 West Main, Jacksonville 72076	1973	W. R. Brooksher, P. O. Box 3096, Fort Smith 72901— <i>CHAIRMAN</i>	
COMMITTEE ON LIAISON WITH THE NURSING PROFESSION		H. W. Thomas, 105 North Freeman, Dermott 71638	
J. R. Pierce, Jr., 1712 West 42nd, Pine Bluff 71601	1974	Ben N. Saltzman, 126 West 6th, Mountain Home 72653	
Robert H. Whitehead, Jr., Donaghey Building, Little Rock 72201	1972	SENIOR MEDICAL DAY COMMITTEE	
Fred C. Inman, Jr., 521 N. Williams, Carlisle 72024	1972	Ralph A. Downs, 119 North Van Buren, Little Rock 72205— <i>CHAIRMAN</i>	
Frank T. Padberg, 500 South University, Little Rock 72205— <i>CHAIRMAN</i>	1973	Calvin R. Simmons, 1714 West 42nd, Pine Bluff 71601	
Elbert H. Wilkes, 5322 West Markham, Little Rock 72205	1973	LIAISON COMMITTEE WITH STATE WELFARE DEPARTMENT	
Morris Henry, 201 South East Street, Fayetteville 72701	1974	(Composed of Executive Committee)	
COMMITTEE ON MEDICINE AND RELIGION		PHYSICIAN TO WORK WITH AMA COMMITTEE ON QUACKERY	
Kenneth A. Siler, 651 North Spring, Harrison 72601	1974	Frank M. Burton, 101 Whittington, Hot Springs 71901	
		COMMITTEE ON PHARMACY	
		Willie R. Harris, England Hospital, England 72046— <i>CHAIRMAN</i>	
		Art B. Martin, 1500 Dodson, Fort Smith 72901	
		Martin F. Heidgen, 1808 West Main, Russellville 72801	

ARKANSAS STATE ADVISORY COMMITTEE TO
THE SELECTIVE SERVICE SYSTEM

Joseph W. Ledbetter, 804 South Church,
Jonesboro 72401
Edwin L. Dunaway, 919 Locust, Conway 72032
T. S. Van Duyn, P. O. Box 110, Stuttgart 72160
W. A. Regnier, P. O. Box 678, Crossett 71635
Allen R. Russell, 1024 Poplar, Pine Bluff 71601
James F. Clark, 524 West Faulkner, El Dorado 71730
Gerald H. Teasley, 401 East 5th,
Texarkana 75501—*CHAIRMAN*
Frank M. Burton, 101 Whittington, Hot Springs 71901
John T. Herron, 4815 West Markham, Little Rock 72205
Robert A. Calcote, Donaghey Building,
Little Rock 72201
Ulys Jackson, 118 South Pine, Harrison 72601
Friedman Sisco, 101 South Shilo, Springdale 72764
L. A. Whittaker, Jr., 708 Lexington, Fort Smith 72901

STUDENT AMA LIAISON COMMITTEE

Alfred Kahn, Jr., 1300 West Sixth,
Little Rock 72201 —*CHAIRMAN*
Elvin Shuffield, 1000 Wolfe, Little Rock 72202
William A. Snodgrass, Jr., 8A Quapaw Tower Apts.,
Little Rock 72202
Thomas D. Honeycutt, 4124 West 11th,
Little Rock 72204

COMMITTEE ON EMERGENCY HEALTH SERVICES

Robert M. Bransford, 401 East 5th,
Texarkana 75501—*CHAIRMAN*
Ben N. Saltzman, 126 West Sixth,
Mountain Home 72653
J. Warren Murry, 1749 North College,
Fayetteville 72701
Art B. Martin, 1500 Dodson, Fort Smith 72901
John P. Wood, 907 Mena, Mena 71953

PROFESSIONAL SERVICES REVIEW ORGANIZATION

Term Expires April 30	Committee Members (Name and Address)	Specialty Represented
1973	C. Lewis Hyatt, 515 N. Main, Monticello 71655	Gen. Pr.
1972	Ross Fowler, 215 West Stephenson, Harrison 72601	Gen. Pr.
1973	Art B. Martin, 1500 Dodson, Fort Smith 72901	Int. Med.
1972	W. Sexton Lewis, 900 N. University, Little Rock 72207	Int. Med.
1974	Wright Hawkins, 100 S. 14th, Fort Smith 72901	Surgery
1972	Gilbert O. Dean, Donaghey Bldg., Little Rock 72201	Surgery
1973	Rhys A. Williams, 651 N. Spring, Harrison 72601	Surgery
1974	Purcell Smith, Jr., P. O. Box 7008, Little Rock 72205	Allergy
1973	John L. Weare, 1120 Marshall, Little Rock 72202	Anes.

Term Expires April 30	Committee Members (Name and Address)	Specialty Represented
1974	A. C. Bradford, 100 S. 14th, Fort Smith 72901	Derm.
1974	James L. Smith, 623 Woodlane, Little Rock 72201	Oph.
1974	E. L. Milner, 500 S. University, Little Rock 72205	Oto.
1972	Robert F. McCrary, 505 W. Grand, Hot Springs 71901	OB-GYN
1973	Robert Watson, Donaghey Building, Little Rock 72201	Neurology
1973	John V. Busby, 1201 Bishop, Little Rock 72202	Psychiatry
1972	Lloyd R. Warford, 6213 Lee Avenue, Little Rock 72205	Pediatrics
1974	W. J. Rhinehart, Donaghey Building, Little Rock 72201	Radiology
1972	Kenneth R. Duzan, 443 W. Oak, El Dorado 71730	Pathology
1972	H. Austin Grimes, P. O. Box 5270, Little Rock 72205	Orthopedics
1973	Carl Wilson, 1500 Dodson, Fort Smith 72901	Urology
—	Charles F. Wilkins, Jr., 3005 W. Main Place, Russellville 72801	(Chairman)
—	Stanley Applegate, 220 Meadow Ave., Springdale 72764	(President)
—	Robert Watson, Donaghey Building, Little Rock 72201	(President-elect)
—	Elvin Shuffield, 1000 Wolfe, Little Rock 72202	(Secretary)
—	C. C. Long, 110 W. Commercial, Ozark 72949	(Council Chairman)

Sub-Committee of Sub-Specialties
(representatives on call to meet with Review
Organization as needed when claims in spe-
cialty field are considered)

Term Expires April 30	Sub-Committee Representative (Name and Address)	Sub-Specialty Represented
*	Carl L. Williams, 522 S. 16th, Fort Smith 72901	Thoracic Surgery
*	T. J. Smith, 900 N. University, Little Rock 72207	Gastroenterology
*	Thomas H. Allen, 413 N. University, Little Rock 72205	Plastic Surgery
*	John C. Schultz, 900 N. University, Little Rock 72207	Pulmonary Diseases
*	Kelsy Caplinger, III, 4001 W. Capitol, Little Rock 72205	Pediatric Allergy
* Terms to be designated by Professional Services Review Organization		

**WOMAN'S AUXILIARY TO
ARKANSAS MEDICAL SOCIETY
47TH ANNUAL CONVENTION—1971**

The Woman's Auxiliary to the Arkansas Medical Society 47th Annual Convention was held April 26-27, 1971 at the Arlington Hotel, Hot Springs, Arkansas, with the President, Mrs. Lynn Harris, presiding.

Greetings were extended by Dr. Jack Kennedy, President, Arkansas Medical Society and Mr. Paul C. Schaefer, Executive Vice President, Arkansas Medical Society. Both of these gentlemen urged the support of the Auxiliary in legislative action and suggested that perhaps an increase in state dues would be helpful in this respect.

Distinguished guests were introduced by Mrs. Harris: Mrs. Jack Kennedy, wife of the Society President; Mrs. Amos Johnson of Garland, North Carolina, Southern Regional Vice President Woman's Auxiliary to the American Medical Association;

Mrs. Ramsay H. Moore, Dallas, Texas, President, Woman's Auxiliary to the Southern Medical Association; Mrs. John M. Chenault, Decatur, Alabama; Mrs. Harold Langston, President-Elect of the Woman's Auxiliary to the Arkansas Medical Society.

The President, Mrs. Harris, announced the formation of the "Health Careers Council of Arkansas" and that the Woman's Auxiliary to the Arkansas Medical Society had contributed \$100.00 to this cause. She also said that the Executive Board polled by mail showed the members in general to feel that an increase in state dues would be necessary within the near future.

Mrs. Charles Wilkins, Finance Chairman, presented the proposed budget for 1971-72, which was approved.

Mrs. Louis Hundley moved that the Chairman of the Ilse F. Oates Student Loan Fund be authorized to increase the amount of individual



The Past Presidents' Club of the Woman's Auxiliary to the Arkansas Medical Society. Breakfast meeting, April 27, 1971.



Mrs. Harold D. Langston (right) heads the Woman's Auxiliary for 1971-72. Mrs. W. Myers Smith is President-elect.



Mrs. Art B. Martin of Fort Smith was named "Arkansas Doctor's Wife of the Year".



Mrs. Robert Nunnally, Mrs. Harold D. Langston, Mrs. W. Myers Smith, and Mrs. Harlan Hill, officers of the Woman's Auxiliary to the Arkansas Medical Society for 1971-72.

loans to \$1,000.00, and that loans be authorized for members of the Senior Class in transition to post-doctoral study. This was so adopted.

Reports were given by the Officers, Committee Chairmen and County Presidents. All reports will be published in the official "Minutes and Reports". The report of the Registration Committee by Mrs. Robert Stainton showed a registration of 112.

The President's Award of ARKANSAS DOCTOR'S WIFE OF THE YEAR went to Mrs. Art B. Martin of Sebastian County. Presentation made by Mrs. Harris at the Monday luncheon which was arranged by Pulaski County Medical Auxiliary, Mrs. Paul Means, Chairman. The address by Mrs. Amos Johnson was well received.

Pulaski County Medical Auxiliary also served as hostess for the luncheon on Tuesday at the Downtowner with Mrs. James Abraham as Arrangements Chairman. Mrs. Ramsay H. Moore brought "Greetings from Southern" in a most delightful way. The new officers were installed by Mrs. Mason G. Lawson:

President—Mrs. Harold Langston, Little Rock
President-Elect—Mrs. W. Myers Smith, Little Rock

Recording Secretary—Mrs. James Bethel, Benton

Treasurer—Mrs. Harlan Hill, Little Rock

Northeast Vice-Pres.—Mrs. Asa Crow, Paragould

Southeast Vice-Pres.—Mrs. Charles McCarty, Helena

Southwest Vice-Pres.—Mrs. Robert Nunnally, Gurdon

Northwest Vice-Pres.—Mrs. D. J. McMinimy, Fort Smith

Mrs. Charles Wilkins made the report from the Past President's Breakfast. Their contribution to AMA-ERF was made in memory of Dr. John T. Gray of Jonesboro.

The membership expressed its appreciation to Mrs. Curry B. Bradburn, General Convention Chairman, for the excellent meeting arrangements.

In her president's message, Mrs. Harold Langston, stressed her theme for the year "Strength in Unity". At a brief post-convention board meeting Mrs. Langston announced plans for a June meeting of the board in Little Rock.

Mrs. Carl L. Wilson
Acting Recording Secretary





EDITORIAL

The Nervous System—Newer Ideas

Alfred Kahn, Jr., M.D.

The presidential address of the 52nd annual meeting of the Endocrine Society was given by R. H. Williams on "Metabolism and Mentation" (published in the *Journal of Clinical Endocrinology and Metabolism*, Vol. 31, p. 461, November, 1970). It is of extreme interest in that it offers some vistas in the chemical background of thinking. As Williams states, "The ultimate supreme function of the body is mentation" and "all abnormalities in mentation are associated with altered metabolism". Conversely altered metabolism can directly or indirectly alter mentation—which is really implied in William's quote.

Williams has a chart of genetic disorders which are associated with dysmentation including such diseases as Albright's hereditary osteodystrophy, Down's Syndrome, Apert's Syndrome, infantile hypercalcemia, Tay-Sachs Disease, etc. These genetic disorders number at least 36. It is pointed out that most enzyme disorders involving amino acids can cause mental disease; enzyme disorders can cause abnormal behavior patterns as well as retardation—as Lesch-Nyhan Syndrome causes aggressive behavior. Endocrinopathies may cause disordered thinking but Williams' reviews of the literature indicated great variation among observers. Perhaps little attention has been paid to this facet of endocrine disease. In any event there are papers documenting the association of dysmentation and various endocrinopathies. Parathyroid disorders are said to be able to cause loss of initiative, listlessness, impaired memory, and even psychosis. Adrenal dysfunction as Cushing's Disease has been associated with depression; it is fascinating that it has been proposed that Cushing's Disease may be a psychosomatic disturbance in a predisposed individual (one with a latent hypothalamic-pituitary

disorder). Addison's Disease patients have depression and paranoid traits frequently. Myxedema produces slowed learning and delusions.

Williams stresses that many endocrine disorders are associated with depression. Mania is usually accompanied by increases in norepinephrine and serotonin, and mania can be benefited by drugs that decrease these chemicals. Schizophrenia is not associated with a characteristic chemical pattern as discerned by current research. Long term memory is associated with synthesis of protein, DNA, and RNA. Short term memory is associated with certain synaptic changes. Sleep is influenced by serotonin, catecholamines, glucosteroids, and other hormonal substances. It is reported that amphetamines and catecholamines decrease REM sleep. Increase in brain 5-HT by drugs increases sleep. The neurotransmitters of the brain including acetyl choline, dopamine, norepinephrine, serotonin, etc., may be altered in amount and this will reflect itself in mental or behavioral changes. Acetyl choline is increased by pentobarbital escrine, etc.; it can be reduced by atropine and scopolamine; these drugs in turn influence behavior. Catecholamines significantly alter behavior as does serotonin.

Stewart Wolf (*Archives of Internal Medicine*, Vol. 126, p. 1024, December, 1970) has reviewed "Emotions and the Autonomic Nervous System". Wolf points out that emotion is not a cause but a part of a reaction to a circumstance; it is considered by some to be a feeling state; or it may be thought of as a central integrative process which interprets life experiences. He points out that a human being is a "complex of closely interrelated and more or less interdependent subsystems so that a disturbance in one may not

only exert effects far afield, but may even elicit a major adjustment in another system." Wolf stresses that the nervous system is organized and integrated for not alone stimulatory reactions but inhibitory reactions, and the connections are such that wide areas of the nervous system are involved in responses. Visceral, vascular, and endocrine reaction patterns in the nervous system in general follow the same rules as the musculo-skeletal system. Many of the earlier concepts of the autonomic nervous system have been proved to be faulty; for example, it has been shown that the autonomic system does not discharge as a whole, but there is a gradation of response and there are modulating influences; rather than a sympathetic para-sympathetic balance, workers now believe the sympathetic system consists of excretory and inhibitory enzymes and neurons that effect cell membranes. Researchers have confirmed the neuro-humoral transmission role of acetyl choline and norepinephrine; these agents may be inhibited or protected by various agents that block their release, their destruction, or their ability to stimulate an end organ. Autonomic responses seem to be the result of multiple effectors; stimulation of areas of the brain have helped uncover some of these responses which require synergistic actions of the sympathetic and para-sympathetic systems. The endocrine systems relationships with the autonomic nervous system have been studied via the pituitary adrenal axis; Wolf cites, "the very important concept of the permissive role of the adrenal corticoid hormone in autonomic effector functions, as illustrated by the fact that vagal stimulation of gastric hydrochloric acid secretions depends to a considerable extent upon the intactness of the pituitary adrenal axis." Lastly, Wolf comments that the prevailing state or "set" of the body effect the result of the various autonomic stimuli upon the body. It is apparent that considering the body's set plus the total stimulation it receives makes it difficult to isolate, study, and measure the effects of just one component stimulus.

THINGS



TO COME

Congress On Occupational Health To Be Held

The Thirty-first Annual American Medical Association Congress on Occupational Health will be held at Jackson Lake Lodge in Grand Teton National Park, Wyoming, August 29-30, 1971.



O B I T U A R Y

Dr. G. J. Floyd

Dr. G. J. Floyd of Murfreesboro died on April 23, 1971, in Vicksburg, Mississippi, at the age of fifty.

Dr. Floyd was born in Nashville, Arkansas. He attended Nashville High School, Little Rock Junior College, Hendrix College, and graduated from the University of Arkansas School of Medicine in 1953. Dr. Floyd was a veteran of both World War II and the Korean Conflict.

In 1969, he was chosen as one of the Personalities of the South for outstanding service to his community. Dr. Floyd had served as president of the Howard-Pike County Medical Society, was on the staff of both Pike County Memorial Hospital and Howard County Memorial Hospital, and served on the Board of Directors of the First United Methodist Church in Murfreesboro.

Dr. Floyd is survived by his wife, Dortha, three sons, his mother, one brother, and one sister.





PERSONAL AND NEWS ITEMS

Dr. Baker Named To State Post

Dr. Glen F. Baker of Jonesboro has been named second vice chairman of the Arkansas Regional Medical Program's Regional Advisory Group, which is the organization's governing body.

Dr. Lincoln Seminar Chairman

Dr. Ben M. Lincoln of Little Rock was chairman of a seminar on blood flow in coronary and pulmonary arteries held on May 14 and 15 in Shreveport, Louisiana. The two-day meeting was sponsored by the Arkansas and Louisiana Heart Associations, the Louisiana State University, and the American Heart Council on Clinical Cardiology.

Dr. Freeland Has New Associate

Dr. James W. Freeland of Star City has announced that Dr. Sanford E. Hutson, formerly of Stuttgart, has joined him in the practice of medicine at the Freeland Medical Clinic in Star City.

Physicians Attend Meeting

Dr. Francis M. Henderson of Pine Bluff and Dr. A. C. Bradford of Fort Smith attended the recent meeting of the Arkansas Medical Assistants Society which was held in Pine Bluff. Dr. Henderson was master of ceremonies for the annual banquet and Dr. Bradford spoke on public relations.

Dr. Massey Honored

The "Legion of Honor" was presented to Dr. L. D. Massey by his fellow Kiwanians at the group's annual awards day meeting in April. Dr. Massey, of Osceola, has been a member of Kiwanis International for twenty-five years.

Dr. Dudley Named Fellow

Dr. Guilford M. Dudley, III, has been elected to a Fellowship in the American College of Physicians by the Board of Regents. Dr. Dudley is also a Diplomat of the American Board of Internal Medicine. He is a member of the staff at Harris Hospital and Clinic in Newport.

Physician's Article Published

An article entitled "Are Anesthesiologists Being Held Liable Without Fault?" by Dr. Charles W. Quimby, Jr., of Little Rock was published in the May issue of the Southern Medical Journal.

New Office For Dr. Benafield

Construction has begun on a new office building for Dr. Robert B. Benafield. The building, which will be located on Front Street in Conway, is expected to be ready for occupancy in June. Dr. Benafield's office is presently located at 919 Locust, Conway.

Dr. Saltzman Keynote Speaker

Dr. Ben N. Saltzman of Mountain Home was the keynote speaker at the annual convention of The Arkansas Nursing Home Association, which was held in Hot Springs in April. Other speakers at the meeting were Dr. Roger Bost, Director of Social and Rehabilitative Services for Arkansas, and Dr. J. T. Herron, State Health Officer.

Dr. Scully Shows Slides

Dr. Francis J. Scully of Hot Springs recently showed slides taken by him on a trip to the Holy Land at a meeting of the members of St. Mary's Council of Catholic Men.

Dr. McCurry Attends Meetings

Dr. J. W. McCurry of St. Louis attended the Mid-South Medical Meeting and alumni luncheon held in Memphis, Tennessee. At age 97, Dr. McCurry is the oldest known alumnus of the University of Tennessee College of Medicine.

Dr. McCurry, who is a life member of the Arkansas Medical Society, attended the Society's annual meeting in Hot Springs, April 25-28. He practiced in Cash, Arkansas, until approximately four years ago.

Orthopaedic Society Grants

Honorary Membership

At its April meeting in Hot Springs, the Arkansas Orthopaedic Society voted to confer honorary membership upon Dr. Alfred B. Swanson of Grand Rapids, Michigan. He is chief of the Department of Orthopaedic Surgery, Blodgett Memorial Hospital in Grand Rapids, and a Fellow, American College of Surgeons.

Dr. Swanson was one of the guest speakers at the annual meeting of the Arkansas Medical Society and also spoke to the Orthopaedic Group at their meeting.

New officers for the current year were elected at the April meeting. They are Dr. Charles N. McKenzie, president; and Dr. Harold Hutson, secretary-treasurer, both of Little Rock.

MEDICINE IN THE



May 11, 1971

Arkansas Medical Society
Office of The Executive Vice-President
214 North 12th Street
P. O. Box 1208
Fort Smith, Arkansas 72901

Attention: Mr. Paul C. Schaefer

Dear Friends:

I would like to take this opportunity to thank the Society as a whole, the Council and especially the House of Delegates for the support, words of appreciation, and the vote of confidence so well expressed in the resolution to Governor Dale Bumpers on April 28, 1971.

Arkansas' Public Health Program, as com-

pared to many other states, is better able to cope with the ever increasing problems we encounter in protecting our environment against all those things that man does to defile it. The State Board of Health must, of necessity, promulgate the necessary regulations to accomplish this end. Our efforts in this direction are, of course, opposed by those who would find it both convenient and profitable to carry out their activities without Health Department regulations.

It is certainly a comfort to have your cooperation and strong vote of confidence.

Sincerely yours,

J. T. Herron, M.D.

State Health Officer

JTH:ak

NOTICE TO ALL PHYSICIANS

The Bureau of Narcotics requested the Journal of the Arkansas Medical Society to notify all physicians that under the new law, all prescriptions for controlled substances must have the physicians' new Bureau of Narcotics and Dangerous Drugs (BNDD) registration number shown on the prescription. Pharmacists are required to show the physicians' registration number on the prescription.

The Bureau suggests that all physicians prepare and mail a form letter to all pharmacists handling his prescriptions, giving the pharmacist his new registration number or the date the new number was applied for. Physicians having a narcotics stamp have been furnished the new number by the Bureau. Those who have not ever had a narcotics stamp must apply to the Bureau of Narcotics and Dangerous Drugs for a registration number.

The following telegram was received from Mr. John Finlator, Deputy Director of the Bureau of Narcotics and Dangerous Drugs, Washington, D. C.: "To insure uninterrupted medical care, all potential registrants who are legally qualified to register

under the controlled substances act and who have applied for BNDD registration but who have not yet received a BNDD registration number may carry out the dictates of their profession without interruption. They may prescribe, dispense, distribute and conduct any such activity permitted by state law, by indicating instead of their BNDD number that "Federal registration applied for on _____ (date)". Hospital residents and interns authorized to prescribe under state law must use the hospital registration number in addition to the above statement.

"The industry and the professions are expected to exercise caution and good judgment when supplying controlled substances. If there is any doubt, they should contact the nearest BNDD region office.

"This policy does not relieve any potential registrant from the responsibility to immediately apply for registration if he has not already done so. After July 29, 1971 no activity with controlled substances will be permitted without use of a valid BNDD registration number.

"For further clarification, please contact the office of chief counsel (202) 382-6175."



NEW MEMBERS

Dr. Robert Edwin Elliott

The White County Medical Society has announced that Dr. Robert E. Elliott is a new member of that Society. He was born in Searcy, Arkansas.

Dr. Elliott attended the University of Arkansas at Fayetteville and was graduated from the University of Arkansas School of Medicine in 1965. His internship was completed at the University Medical Center and he also completed a residency in Radiology there in 1969. Dr. Elliott served on active duty in the United States Navy.

He is board certified and is presently in the practice of Radiology at 102 West Center, Searcy.

* * *

Dr. Benjamin Rodger Lowery

Dr. Benjamin R. Lowery, a native of St. Louis, Missouri, has been accepted for membership in the White County Medical Society.

In 1962, he was graduated from Arkansas State College, State College, Arkansas, with a B.S.E. degree, and in 1967, he was graduated from the University of Arkansas School of Medicine. Dr. Lowery completed his internship at St. John's Hospital in Tulsa, Oklahoma. From 1968 to 1970, he was on active duty with the United States Naval Reserve.

Dr. Lowery is in the general practice of medicine at 607 Woodruff, Searcy.

* * *

Dr. Clarence Edwin Ransom, Jr.

Dr. Clarence E. Ransom, Jr., is a new member of the White County Medical Society. He was born in Denmark, Arkansas, attended Arkansas State College at State College, Arkansas, and the University of Arkansas at Fayetteville — graduating from the latter in 1969. Dr. Ransom's internship was served at St. Vincent Infirmary in Little Rock. He is in the National Guard Reserve.

Dr. Ransom is a general practitioner. His office is at 910 East Race Avenue, Searcy.

Dr. William D. White

Dr. William D. White has been added to the membership roll of the White County Medical Society. He is a native of England, Arkansas.

Dr. White received a B.A. degree from the University of Arkansas at Fayetteville in 1959 and graduated from the Pritzker School of Medicine of the University of Chicago in 1963. He then returned to Arkansas, where he completed his internship in 1964 and a residency in internal medicine in 1970, both at the University of Arkansas Medical Center. Dr. White was with the United States Public Health Service (Indian Health) from 1964 to 1967.

His specialty is Internal Medicine and Gastroenterology and his office is at 1407 East Race Avenue, Searcy.

* * *

Dr. Lackey Gene Moody

Dr. Lackey G. Moody has been accepted for membership in the Independence County Medical Society. He was born in Gassville, Arkansas.

Dr. Moody received a B.S. and M.S. degree from the University of Arkansas at Fayetteville. He was graduated from the University of Arkansas School of Medicine in 1967 and completed his internship at Hillcrest Medical Center, Tulsa, Oklahoma. For two years, Dr. Moody served at the United States Public Health Service Hospital, Detroit, Michigan, as Chief of the Outpatient Department. He also served on the surgical staff of that hospital, and on the emergency room staff at Highland Park General Hospital and Redford Medical Center.

Dr. Moody is associated with Dr. Wesley J. Ketz in the general practice of medicine at offices located at 377 East Main in Batesville.

* * *

Pulaski County Medical Society announces the recent addition of nine new members to its membership roll. The new members are:

Dr. James L. Dennis

Dr. James L. Dennis is a native of Britton, Oklahoma (now Oklahoma City). After graduating from Britton High School, Dr. Dennis entered Central State College in Edmond, Oklahoma, from which he received a B.S. degree in 1936. In 1940, he received an M.D. degree from the University of Oklahoma School of Medicine in Oklahoma City. Dr. Dennis interned at the Highland Alameda County General Hospital in Oakland, California, from 1940-41. From 1943 to 1946, he served as a lieutenant in the United

States Naval Reserve. Dr. Dennis completed a residency in pediatrics at the University of Texas Medical Branch, Galveston, Texas, in 1952.

Dr. Dennis is certified by the American Board of Pediatrics. He is a life member of the American Academy of Pediatrics and holds memberships in the Southern Medical Association, American Medical Association, Southern Pediatric Research Society, AAAS, and Sigma Xi. Dr. Dennis was a member of the Oklahoma State Medical Association from 1964 to 1970. He has held teaching appointments at the Universities of Texas, California, Arkansas, and Oklahoma.

Dr. Dennis is Vice President for Health Sciences at the University of Arkansas School of Medicine.

* * *

Dr. Ronald D. Fewell

Dr. Ronald D. Fewell was born in Little Rock. He received his pre-medical education at North Little Rock High School, Little Rock University, and the University of Arkansas at Fayetteville.

Dr. Fewell graduated from the University of Arkansas School of Medicine in 1969. After completing his internship at St. Vincent Infirmary in 1970, he joined Drs. Thomas Wortham and Rex Moore in the general practice of medicine at 813 Marshall Road, Jacksonville, Arkansas.

* * *

Dr. James S. Garrison

Dr. James S. Garrison is a native of Little Rock. He received his B.A. degree from the University of Arkansas at Fayetteville in 1959. In 1964, Dr. Garrison graduated from the University of Arkansas School of Medicine. He interned at the University Medical Center and completed a three year residency in Radiology there in 1970.

Dr. Garrison is a member of the American Medical Association, the American College of Radiology, and the Arkansas Radiological Society.

He is an instructor in Radiology at the University of Arkansas School of Medicine.

* * *

Dr. Raymond Phillip Miller, Sr.

Dr. Raymond P. Miller was born in Cotton Plant, Arkansas. In 1955, after graduating from the Cotton Plant Vocational School, he attended Arkansas A M & N College in Pine Bluff, re-

ceiving his B.S. degree in 1959. He received his M.D. degree from the University of Arkansas School of Medicine in 1963. Dr. Miller interned at the University Medical Center and also completed two residencies there — one in Internal Medicine, completed in 1967; and the other in Pulmonary Disease, completed in 1967. He held a teaching appointment at the University of Arkansas Medical Center from 1967 to 1968, and served as a major in the United States Army from 1968 to 1970.

Dr. Miller is certified by the American Board of Internal Medicine and is a member of the American Thoracic Society.

His office is at 5918 Lee, Little Rock, where he specializes in Internal Medicine and Pulmonary Diseases.

* * *

Dr. Robert Booth Moore

Dr. Robert B. Moore is a native of Little Rock. He received a B.A. and an M.A. degree from Vanderbilt University in Nashville, Tennessee, and was graduated from Harvard Medical School in Boston, Massachusetts, in 1963. Dr. Moore interned at the University of Oregon Medical School Hospitals in Portland. He served in the United States Army from 1964 to 1966. Dr. Moore's residency work in internal medicine was at the University of Arkansas Medical Center; following completion of his residency in 1969, he was a Fellow in Hematology. He was an Instructor in Medicine at the University of Arkansas Medical Center from 1969 to 1970.

Dr. Moore is a member of the Arkansas Society of Clinical Hematology. His specialty is Internal Medicine and Hematology, and his office is at 5918 Lee, Little Rock.

* * *

Dr. Hoyt R. Pyle, Jr.

Dr. Hoyt R. Pyle, Jr., is a native of Fort Smith, Arkansas. He received his pre-medical education from Little Rock Central High School and the University of Arkansas, receiving a B.A. degree from the latter. In 1963, Dr. Pyle graduated from the University of Arkansas School of Medicine. He stayed on at the University Medical Center for his internship and a residency in internal medicine, which he completed in 1967. He was also a Fellow in renal disease. Dr. Pyle was an Instructor in Medicine and a Fellow in Nephrology at the University of Arkansas Med-

ical Center. He was in the Naval Reserve for two years.

Dr. Pyle is in the practice of Internal Medicine and Nephrology at 5918 Lee Avenue, Little Rock.

* * *

Dr. John Fletcher Redman

Dr. John F. Redman was born in Fort Smith. He attended Hendrix College in Conway and Arkansas Polytechnic College in Russellville. In June of 1963, he was graduated from the University of Arkansas School of Medicine. His internship and residency training in surgery were completed at the Confederate Memorial Medical Center in Shreveport. In 1965, he returned to the University Medical Center in Little Rock for a residency in urology, which he completed in 1968. Dr. Redman served in the Air Force Medical Corps from 1968 to 1970. From June to October 1968 he was an Instructor of Urology at the University Medical Center; since that time, he has been an Assistant Professor of Urology.

Dr. Redman is a member of the Society of University Urologists, Association of Academic Surgery, American Medical Association, and a Candidate in the American College of Surgeons.

* * *

Dr. William Anthony Sodeman, Jr.

Dr. William A. Sodeman, Jr., is a native of New Orleans, Louisiana. In 1956, he received a B.A. degree from the University of Missouri, and was graduated from the University of Pennsylvania School of Medicine in 1960. Dr. Sodeman interned at the University Hospital in Ann Arbor, Michigan. His residency work in Internal Medicine and Gastroenterology, which he completed in 1966, was at the University of Michigan in Ann Arbor.

Dr. Sodeman has held the following teaching appointments: Instructor, Department of Internal Medicine, University of Michigan; Chief, Gastroenterology, Veterans Administration Hospital, Ann Arbor; Assistant Professor, Department of Internal Medicine, University of Michigan; and Principal Investigator, Schistosome Research Project, The Liberian Institute of the American Foundation for Tropical Medicine, Harbel.

He is a member of the American College of Physicians, American Gastroenterological Association, Central Society for Clinical Research,

and the American Society of Tropical Medicine and Hygiene.

Dr. Sodeman is Associate Professor, Department of Internal Medicine, and Chief, Gastroenterology, at the University of Arkansas School of Medicine.

* * *

Dr. Jack Wagoner

Dr. Jack Wagoner was born in Memphis, Tennessee. He graduated from Will Rogers High School in Tulsa, Oklahoma, and from the University of Arkansas at Fayetteville. In 1963, he graduated from the University of Arkansas School of Medicine and completed his internship at the University Medical Center. From 1964 to 1966, Dr. Wagoner served as a captain in the Air Force. He returned to the University Medical Center in 1966 for a residency in Internal Medicine, which he completed in 1969; he was a Fellow in Chest Medicine. Dr. Wagoner is certified by the American Board of Internal Medicine and a member of the American Thoracic Society.

Dr. Wagoner's office is at 5918 Lee, Little Rock, where he specializes in the practice of Internal Medicine.



Metastatic Cancer of Unknown Primary Site

F. F. Holmes (Univ of Kansas Medical Center, Kansas City 66102) and T. L. Fouts
Cancer 26:816-820 (Oct) 1970

Characteristics of 686 patients with the diagnosis of metastatic cancer of unknown primary site were studied. Average age of the series is 60.2 years, and ratio of males to females is 58.42. Bones, lungs, and liver are the common sites of metastases, and adenocarcinoma, carcinoma, and anaplastic carcinoma are the most histologic types. Two-year survival for all patients is 10.4%, five-year 5.1%, and ten-year 3.3%. Average age of the 27 patients surviving five years or longer is 52.5 years. Of the 14 patients of this latter group now dead, only two died of cancer. Speculation about both elusive primary tumors and occasional long survival must include primary tumors too small to be found at either clinical examination or autopsy, inadvertent removal or destruction of primary earlier by physician or sloughing by host, or destruction or containment of tumor by host defense mechanisms.

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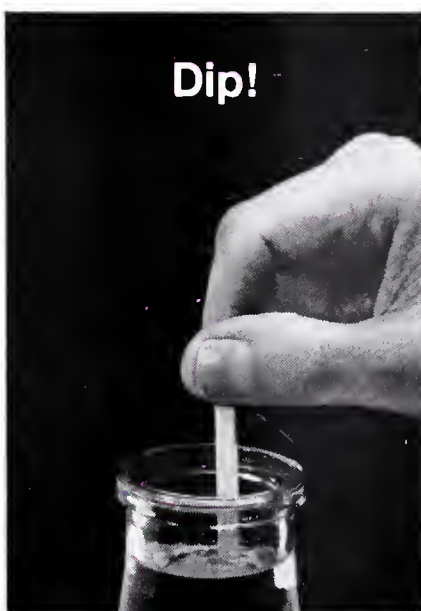
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THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

July, 1971

Vol. 68 No. 2

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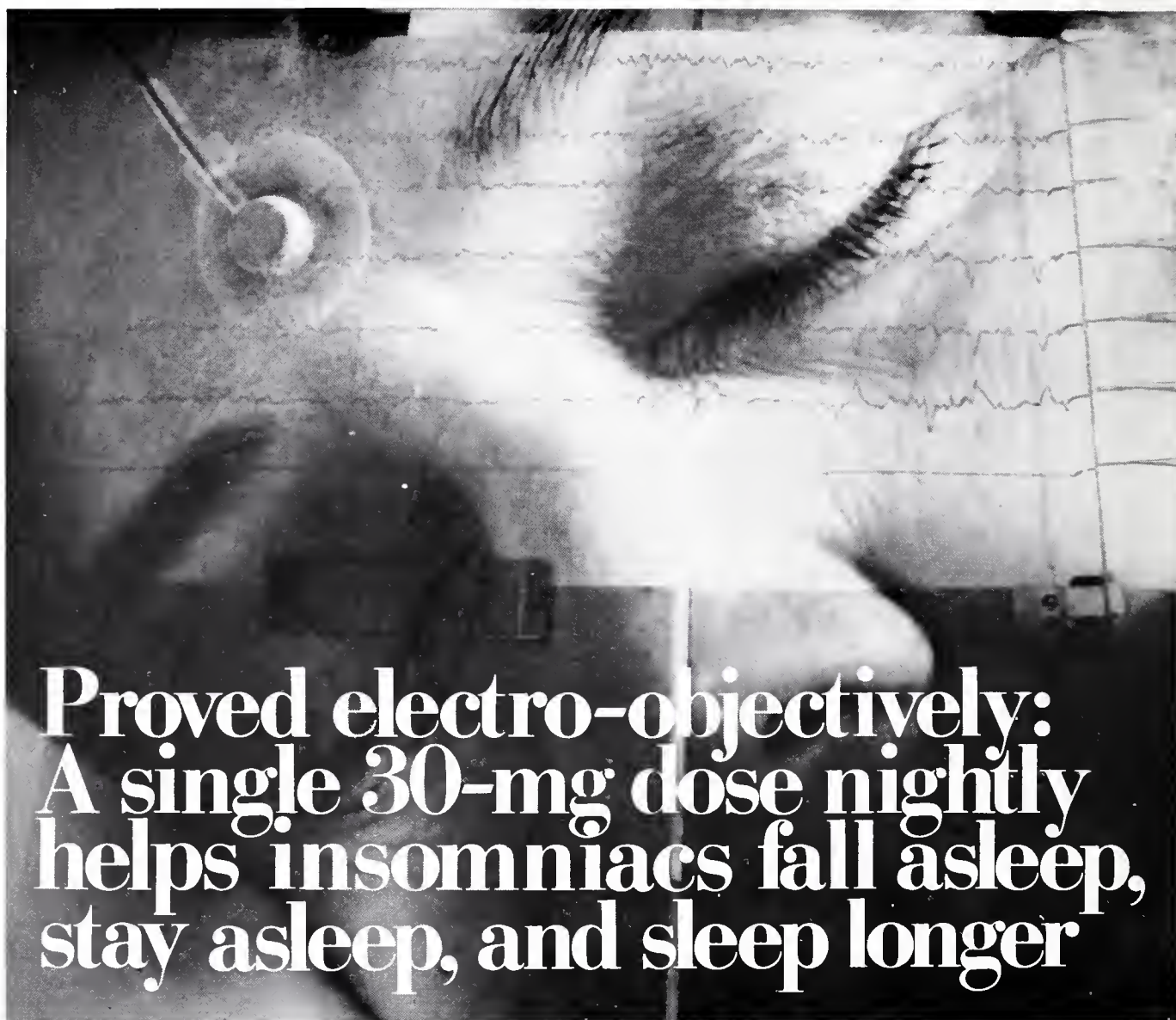
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100133



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.^{1,2,3}

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,¹ Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

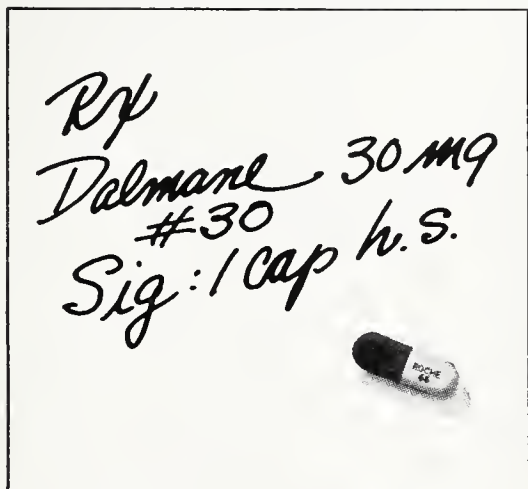
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.³ Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., et al.: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. 2. Kales, A., et al.: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. 3. Data on file, Medical Department, Hoffmann-La Roche Inc.



Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

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Man and Medicine—The Conquest Ahead!

James L. Dennis, M.D.*

Man and Medicine—The Conquest Ahead! What an intriguing subject—one which we can sensationalize with a considerable degree of justification. Before indulging in such pleasurable vanity I must remind you that in all things in this world there is a remarkable balance. Every asset must eventually be equated with an offsetting liability. Medical conquests are no exception.

In this regard there are many parallels between the conquests and the consequences of medical science and those of industry. Each has conducted research in response to the opportunities and the challenges of the times. In this sense they have given credence to the aphorism that “necessity is the mother of invention”, however, it may be more accurate today to say that “invention has become the mother of necessity.”

Advancements in industrial technology have inevitably produced waste products (industrial fallout, if you will) and many of these wastes have created serious environmental hazards. An aroused public awareness in this regard has provided Ralph Nader and his Raiders a new cause célèbre and made ecology the “in” thing in government. Less well recognized are the equally serious problems of human ecology that reflect the consequences of the conquests of medicine. In eliminating pestilence, plague, and disease medicine not only salvaged lives, it extended the life expectancy. These factors, plus the ability of advanced agricultural technology to feed more and more people, combined to make the population explosion inevitable. People pollute the environment and in direct proportion to numbers. In all fairness, this is a fact we should remember in the coming war on industrial wastes.

The problem of population is a disturbing one. Like most men in medicine, I deeply feel

that the mission of a physician is to save lives, prolong life, and to relieve human suffering. I, personally, could never do other than honor this credo, but it gets pretty “sticky” when we project the impact of our successful conquests of disease. Will there be a multiplication of population beyond the resources of the environment to either sustain it or to absorb its wastes? Currently, it is comforting to express faith in the ability of technology to come up with answers to population problems and to argue that we can maintain a continuing ability to expand food production on less acreage. In doing so, we express the hope that we will catch up with the world's hungry and starving people. Our actions represent vital, temporary measures that fail to consider the fact that the ultimate environmental space requirements for food production, disposal of wastes, and for human living is finite; while the potential for human reproduction is infinite! How can we avoid the conclusion that sooner or later medical conquests must lead to the development of socially acceptable methods for family planning and population control? Because the future of the world will be at stake, I predict that we will eventually do so. How to accomplish this in a humane, moral, and ethical manner acceptable to all cultures remains one of medicine's most essential, unfulfilled conquests.

All of the foregoing brings up the question, “Where are we headed?” In Alice in Wonderland, Alice said to the Cheshire cat, “Will you tell me please, which way I ought to go from here?” “That depends a good deal on where you want to get,” said the cat. “I don't much care where,” said Alice. “Then, it doesn't matter which way you go,” said the cat.

It is obvious that we must care and plan for where we want to go and, that we must do a better job of anticipating the consequences of

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our conquests on the way. For example, it has been predicted that by 1990 the people of this nation will have a life expectancy of 96 years. This represents a fantastic cumulative effort of medical conquests. Marvelous, but who is thinking about the impact of such a significant increase in life expectancy in a society that dictates retirement at the age of 65 years or younger? Do we really want to live to 96 if the extra years are largely non-productive, with much of it to be spent in nursing homes? What will this do to the economy of this nation? To the politics of this nation? To our limited health care resources and an already diminished respect for advanced age?

The most immediate challenge to medicine—one that is begging for conquest—is the development of more adequate health care delivery systems. We have a shortage of all kinds of health manpower. The importance of the availability of the physician's time has become a primary concern. As a result, the physician will necessarily become more dependent on medical assistants and allied personnel. If one could free up 50 percent of a doctor's time by use of such people, it could amount to doubling the number of physicians available for the more serious problems which only he is qualified to manage. This is the economical way to approach the doctor shortage but somehow we must produce the new kinds of manpower and this will require financial resources not now in view.

Hospitals will in the future recognize their responsibility to coordinate planning and functions in relation to the community at large. Hospital boards will have to collaborate to provide the services needed for the regions they serve. Hospital costs will continue to rise since such costs are largely a reflection of labor costs. However, some form of nationwide health insurance will emerge in response to the economic burden of hospital care. This has been predicted to occur within the next decade. Hopefully, this will not prove to be a government insurance monopoly, but one in which the government will subsidize only the payment of insurance premiums for poor people.

A better organized and distributed health care delivery system will emerge—in response to necessity if not by design. I am impressed with the sincere concern of my colleagues in practice and I believe that our profession now recognizes

the need to pull together in order to insure the viability of a voluntary system. Orderly planning and logical organization need not necessarily be regimented. The American way would be to combine the efforts of voluntary physicians, voluntary workers and government health agencies in a common goal. It will not be easy, but if we have the will it can be accomplished. As we face crisis after crisis it will become more apparent that in the long run public and private interests are ultimately the same.

A philosopher once stated that "all progress is based upon the universal innate desire on the part of every organism to live beyond its income." In our conquest of disease we are now overdrawn—the time has come to repay our society.

On the brighter side, we undoubtedly stand on the threshold of one of the most exciting ages in the history of mankind. The mysteries of the chemistry of the gene—the unit of heredity—are being rapidly unraveled. Ability to break the genetic code makes it possible to control some, and perhaps most, of the inherited disorders or birth defects. Knowledge of the physiochemical basis for man's "physiologic computer"—our brain—is emerging and this opens the door for the control of mental and emotional disorders. These are the patients who fill a majority of the institutional beds and cause so much human sorrow and social expense in the nation. Only recently Dr. Li at the University of California announced the successful synthesis of the growth hormone of the human pituitary gland, a feat considered impossible a few years ago. We are beginning to salvage many human organs at the time of death for donation to the living. In the future we may be able to place a recipient's body into a state of suspended animation or hibernation until such time as an appropriate therapy can be developed or until a favorable organ is available. The problem of rejection of transplanted organs by antibodies developed by the recipient will be solved by immunological technics but even this may become unnecessary in some instances; for example, heart transplantation, where totally synthetic mechanical hearts are likely to provide better solutions. Prototypes are already available. Specific virus will be identified with the cause of certain types of cancer; and anti-cancer vaccines will become as universal as those

now used for polio and smallpox. Significant conquests, with consequences!

Early in the first years of open heart surgery I was asked to make a decision as to whether it would be proper to elect to do surgery on a mentally defective child who also had a serious but correctable heart anomaly. My response was that had the child come to us with pneumonia or an appendicitis, we would not hesitate to treat her with all of the resources at our command. I saw no difference in principle. The operation was a success; today she is a young adult, doomed to live her life span as a ward of a state mental institution. Did we really serve this patient, her family, perhaps her future child, or our society, properly? I am not sure, but I would feel compelled to make the same decision again. At some point in the future we may have to decide that the rights of society require priority considerations over those of the individual. This could radically alter our concepts of ethics—even of democracy.

The areas of advancement in the biomedical sciences that are going to force us to re-assess the traditional concepts of right and wrong are those that relate to organ transplantation and to the management of persons with congenital defects. I have heard these referred to as modern versions of "the search for the fountain of youth" and of "alchemy." Organ transplants are less likely to restore youth than they are to prolong life and we are already aware of the questions that go with this. Prolong life for whom? For how long? And for what? Certainly, these questions must receive profoundly thoughtful evaluation and within the context of total societal needs.

Dr. Joshua Lederberg refers to the alteration of defective genes as "algeny"—the word obviously suggests an analogy to "alchemy"—the hobby of ancient philosophers and scientists who devoted their "research" to attempts to convert lead into gold. As a pediatrician, I have been thrilled with the implications of the breakthroughs in molecular and genetic chemistry. However, the prospect for successful algeny in the human being at any foreseeable time does not appear as likely as some of the enthusiasts would indicate. More promising is what Dr. Lederberg calls, "euphemics"—the control of gene chemistry from outside the cells. We know that protein synthesis within the cells is stimu-

lated or inhibited by enzymes and chemical substances from outside the cell, hence it is theoretically possible to develop substitutive, or symptomatic treatment—with results that could equate to a clinical cure—much as insulin is used to control diabetes. Unfortunately, this approach does nothing to correct the defects of the genes, while permitting the patient to mature and possibly to reproduce, with the transmission of defects to future generations. The ultimate impact on society and to the human race is predictable. We undoubtedly are going to see some dramatic developments in genetic chemistry and somebody of authority should anticipate the emergency of serious social, ethical, moral, legal, and political issues as a certain consequence.

The time has come to face the realities of what we have accomplished as a prelude to an objective decision as to where we want to go. There is always the danger that many will react and want to stop all further progress. The momentum is too great; it is too late to stop the cumulative effects of our massive industrial and population growth. More than ever in history, we need to mobilize and re-direct the ingenuity of our research talents and our educational strengths to a meaningful survival. Not only must medicine continue to search—but medicine, business, industry and government, must in the future join forces to address the matter of the quality of life as well as the duration of life—and we need to understand that this involves much more than an environment free of pollution, or the gratuity of an additional 20 years of life expectancy. Current public news releases suggest that control of pollution will solve most of our problems, but I would observe that it is possible to be surrounded by pure air, pure water, the luxury of material comforts, to be free of disease and degenerative disorders and yet have an unhappy, sterile and totally unsatisfactory human existence. The emotional and spiritual aspects of human ecology must soon receive the same priority considerations now being directed toward the industrial aspects of ecology. This leads us straight into the family and home where behavioral attitudes, life styles and the personal and nutritional habits of individuals are generated and molded. These are the real determinants of man's health—of mind, as well as body.

If this nation is to remain a truly great society, we must plan and plan well, with an eye on the future. Much of this nation's future is to be found in our children—and the child's future, including health, is probably determined during the early years of his family life. We possess sufficient information to suggest that the chronic and degenerative diseases including many aspects of heart disease that characterize the health problems of late life have their genesis during infancy and early childhood. Certainly behavior problems and anti-social attitudes are generated in the home. The hope of preventive psychiatry lies here. The prevention of social ills lies here, the prevention of heart disease lies here; yet, there is relatively little research that has been done in terms of understanding and managing the ecology of disease and social pathology within the family. In a nation where the social stability is threatened we cannot continue to ignore the family as the basic unit of society nor the fact that the most vulnerable group in our society is our children. Some responsible body must examine our compulsive concern that "more shall live longer" and decide whether this is as important to society as the concern that "more shall live a more meaningful life."

In summary: Advances in science and technology have provided the generative forces for most of the social changes that now face us. We have observed that scientific developments can commit one's soul beyond what anyone imagined possible. There is not the slightest doubt that we now have the base of knowledge and much of the technology that will be required to con-

quer many of the cardiovascular diseases, strokes, high blood pressure, many kidney diseases, virus disease, cancer and many birth defects—but only if we have the will to provide the resources to support continuing research and development in these areas. The challenge is even greater in areas that as yet are virtually unexplored; e.g., the maintenance of health. We have devoted our energies to the cause and cure of disease. Now we must search for the cause of health and methods for the maintenance of health. Since health is more than the absence of disease, we must explore a broader scientific basis for the understanding of the behavior of man.

Finally, we must be concerned with the heritage of our children and grandchildren. We will leave them the know-how of science and technology and a capacity for work. These are the tools they will need for a meaningful conquest of the future if they can find the spirit and the motivation to use them. The extra 20 years of life expectancy we leave to them can provide little joy unless life—meaningful life—can be added to those years. They will be unrewarding years under any circumstance, if our grandchildren are undisciplined, unmotivated, unwanted, addicted, without belief—hence, without faith—hence, without hope and without love. Ultimately, man and medicine must seek a conquest of the vanity and selfish behavior of man. To accomplish this, man and medicine must seek the Divine! To do less is to perish. Perhaps, this is the meaning of the message from our rebellious youth, even if some of them do not recognize it.



Multiple Myeloma and Acute Myelomonocytic Leukemia: Report of Four Cases Possibly Related to Melphalan

R. A. Kyle, R. V. Pierre, and E. D. Bayrd (Mayo Clinic and Mayo Foundation, Rochester, Minn 55901)

New Eng J Med 283:1121-1125 (Nov 19) 1970

A rapidly progressive acute myelomonocytic leukemia developed in four patients who had received prolonged courses of melphalan for 30 to 57 months. Three patients were being treated for typical multiple myeloma (anemia, elevated sedi-

mentation rate, monoclonal serum peaks, Bence Jones proteinuria, lytic bone lesions, and increased numbers of myeloma cells in the marrow) and one for a plasma cell dyscrasia with systemic amyloidosis of five years' duration. Because of the remote likelihood of chance association of acute leukemia and multiple myeloma, the known effect of alkylating agents on DNA, the fact that the leukemia was myelomonocytic, and the long period of treatment with melphalan, a possible etiologic role of melphalan therapy in the development of acute leukemia is suggested.

Suppurative Pylephlebitis with Multiple Liver Abscesses Secondary to Incarcerated Incisional Abdominal Hernia. Report of One Case. Review of Literature

Esteban J. Palacios, M.D.*, Harold J. White, M.D.**
and Raymond C. Read, M.D., F.A.C.S.***

Suppurative pylephlebitis and consequent formation of multiple abscesses is a most serious complication of a focal acute infectious process in an area drained by the portal system.

The 61 percent mortality from this condition in a review of cases from 1940 to 1966¹, and that of 72 percent from an earlier series in 1938 by Ochsner et al² shows that even in the so called modern era, there remains much to be done to lessen the high death rate. In part, this may be due to the fact that the condition is not diagnosed early enough so that vigorous antibiotic therapy can be instituted.

To explain the mechanism of this condition, one might best consider a sequential process starting with a localized infection usually in the lower portion of the gastrointestinal tract. There is then extension from this focus into vicinal veins resulting in a thrombophlebitis with subsequent embolization to the branches of the portal vein and its intrahepatic radicles. In the liver this suppurative thrombophlebitis that ensues causes destruction of the wall of the vein. This then allows the infectious process to pass into the parenchyma leading finally to abscess formation.

Historically, this condition was first described by Waller in 1846³. Since that time some 350 cases have been reported. Many of the earlier reports, including Waller's represented complications secondary to suppurative appendicitis. Through the years other foci have been incriminated, i.e., biliary tract infection, diverticulosis, infected hemorrhoids, and regional enteritis. However, the suppurated vermiform appendix still remains the major offender in all reported cases. Other foci that have been noted include perforated gastric or colonic ulcers, and in the newborn, septic phlebitis of the umbilical vein⁴.

To the best of our knowledge, the circumstances of an incarcerated incisional hernia causing the development of hepatic abscesses

have not been reported heretofore and is the subject of our case report.

Case Report

J.A.G., 76 year old white male, admitted to the Little Rock Veterans Administration Hospital on November 16, 1966, with a three day history of abdominal pain and vomiting, related to an incarcerated left paramedial incisional hernia in the lower abdomen. There was radiological evidence of elevation of the diaphragm and dilated loops of small bowel. The CBC was within normal limits. On admission this hernia was reduced and his symptoms subsided quite dramatically. Approximately a day later he had a temperature of 101° and a laparotomy was performed on the second hospital day. The reduced portion of the ileum, which was about 4-5 feet proximal to the ileocecal junction, appeared to be viable although quite hemorrhagic, particularly at the mesenteric border. There was some blood in the mesentery of this portion of the ileum, but no obstruction and no sign of necrosis of the bowel was noted. The hernial defects were repaired. On his third post-operative day the patient's temperature rose to 104°. He had shaking chills and a leukocytosis (19,500). A blood culture was positive for E. Coli. Tetracycline and penicillin therapy was instituted and later on replaced by kanamycin and colymicin. On the sixth hospital day the patient was re-explored with the thought that there could possibly be a small patch of gangrenous bowel at the site where the mesentery was hemorrhagic. Most of the small bowel was greatly distended with air fluid levels in it. Decompression was carried out. He showed some improvement for just a few days and then became unresponsive. Eight days after the second operation the WBC count rose to 25,400 with a differential showing 80 percent neutrophils. The hematocrit was 32 and hemoglobin 9.7 g. The following day the patient expired.

At post mortem examination the outer surface of the liver did not reveal gross pathology, its weight appeared within normal limits but the organ was somewhat soft on palpation. After

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sections were taken, multiple small abscesses, 1 to 1.5 cm. in diameter were found located deep within the liver (Fig. 1). The portal vein and branches contained a large amount of pus and disintegrating thrombus. The vessel wall appeared swollen, inflamed and partially destroyed. A hemorrhagic area was noted in the intestine involving the entire thickness of the wall. The appendix was normal.

Discussion

Pylephlebitis and liver abscess formation, as indicated above, may be a complication of suppurative disease in the gastrointestinal tract or a complication of abdominal surgery. It is more common in the male with a peak incidence in the third to fourth decades, although as seen in the series by Ochsner et al² it can occur from age 1¼ to age 66.

Clinically such patients may present, with repeated shaking chills, high fever, and sweating. Other features are anorexia, nausea and vomiting, right upper quadrant pain, and right rib tenderness. A gradually enlarging and tender liver with developing jaundice may be pronounced features. In the past hyperbilirubinemia was noted to be associated with one-third of the cases⁵.

Bacteriologic studies reveal the most common organisms to be *E. Coli*, *Strep. hemolyticus*, and *Staph. aureus*. Blood cultures are usually negative. Hoffman⁵, however reported positive cultures in 9 of 13 cases. In our patient, *E. Coli* grew in the blood culture.

Comments

In the past, primary focal infection in the gastrointestinal tract have been the usual initiating cause of pylephlebitis. As our case indicates, mechanical factors may also be implicated in the eventual development of this condition. In the older patient particularly, the alert physician

should recognize that this serious complication can occur in any situation that predisposes to necrosis of the bowel. In this regard one should consider incarcerated hernias as illustrated by this case, and local vascular occlusive disease, in particular that which is of embolic (atheromatous) or atherosclerotic in origin.

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ABSTRACT

Careful review is made of the mortality due to suppurative pylephlebitis with consequent formation of multiple small liver abscesses, its etiology and mechanism.

We are reporting one case of the above mentioned condition following an incarcerated incisional abdominal hernia in a 76 year old white male.

To the best of our knowledge, the circumstances of such an etiologic factor causing the development of hepatic abscesses has not been reported heretofore.

In the past, primary focal infection in the gastrointestinal tract has been the usual initiating cause of pylephlebitis.

As our case indicates, mechanical factors may also be implicated in the eventual development of this condition, particularly in the older patient, including local vascular occlusive disease, in particular that which is of embolic (atheromatous) or atherosclerotic origin.

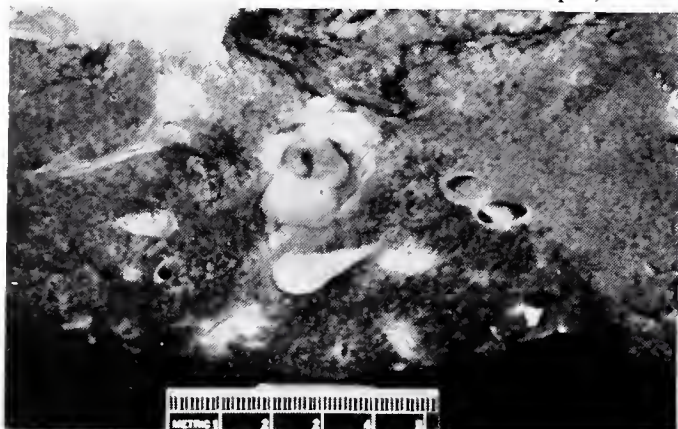


Figure 1
Gross view of liver demonstrating purulent material in the portal vein.

Immediate and Long Range Effects of the Certifying Board in Family Practice*

By

Edward J. Kowalewski, M.D.**

Dr. Kennedy, members of the Arkansas Medical Society, distinguished speakers, guests, ladies and gentlemen.

It is a real pleasure and honor to be with you today, especially since we have just concluded the first examination for the certifying board in family practice.

Since this event has been not only a milestone in the history of our Academy, but also a leading stimulant to a much needed review of the provision of medical care in this country, exactly how it will work and the significance it holds for the future of American health care is of more than passing interest to us all. Many of the details of the new specialty of family practice, the practical methods for creating the bone and sinew of a new discipline in medicine have yet to be developed. I, as you, have many questions that still need to be answered. At this point, nobody has all the answers — some of the questions haven't even been asked.

But I do have some of the answers, and this is what I would like to address myself to today — I want to impart to you the best information available to me, concerning the “immediate and long-range effects of the new certifying board of family practice.”

In this vital formulative stage of the development of the new concept of family practice, there is no constructive value in arguments of semantics of family versus general practice — for only time and experience will dictate the ultimate title.

However, for the sake of this discussion, the obvious place to start with this audience of informed physicians is to draw a distinction between the general practitioner as we know him, and the future diplomate of the American Board of Family Practice.

I would suggest that the real difference is one of inevitable, *developmental evolution*. This has

been caused by the changing needs of society, the vastly increasing body of medical knowledge, the increasing availability of many specialized services and the increasing needs of the patient. It has become increasingly apparent that if we are to have a successful care system, we will have to work through an already established functional social unit like the family. We must recognize the fact that with medical manpower in short supply, there is a great need for more physicians who can take care of most of their patients' needs. We must train them in a special manner and in a shorter period of time so that they are able to fulfill these needs in increasing numbers. The diplomate of family medicine might well be called a third-phase generalist — his approach to medicine will be built on the foundation of yesterday's country doctor and today's general practitioner, but developed from that foundation into something which better fulfills today's medical needs.

The new specialist must function as a continuing medical consultant to his patients, on a comprehensive basis as an advocate rather than just on an emergency or episodic basis, as most medicine now is practiced. This means he will emphasize preventive medicine as much as curative medicine. If he is to be the manager, he must be better informed in all the major disciplines and since modern medicine has seen a big increase in the number of medical disciplines, of necessity, his training period will have to be long enough for him to gain practical working knowledge in all of these fields.

This brings up the matter of who his patients will be. While the classical general practitioner has tried and did frequently succeed in bringing whole families into his practice, the new specialist will have to have family units as his patient entities, because of the fundamental interaction factors in his comprehensive-care approach. He will see each person as a patient but each patient must be considered against the backdrop of his

*Presented to the Annual Session, Arkansas Medical Society, April 27, 1970.

**President, American Academy of General Practice, Akron, Pennsylvania.

family or comparable social unit and the community.

But, you say, good general practitioners have been doing this for years. True. But they were not trained to do it. They developed this inclusive mode of medical practice through an inherent concern for their patients and as a result of indigenous social forces that dictated this approach in their particular communities, and at the expenses of a long period of time.

The curriculum did not emphasize this kind of medicine in medical school, nor in their graduate training. One rather generally accepted view of medical curricula since World War II was set forth recently. It stated that: "The modern student arrives in medical school after four years in a college or university where he has been brought abreast of the newer chemistry, mathematics and physics. When he emerges into the clinical years, he is apt to concentrate on tests, studies and records relating to the patient's condition, rather than on the patient himself. He is a better educated scientist than the physician of the past, but somewhere en route he has lost the basic humanities of the healer." What is really needed . . . "is an approach to education based on insight into the nature of human relationships."

The new diplomate will be taught according to the precepts of this approach, beginning in his undergraduate years and during his family practice residency.

How, you say, can one be taught concern, which is basic to this kind of practice? You don't teach concern. But you can teach existing knowledge that will be useful in the hands of the concerned person, such as basic sociology (how man interacts with his fellows), ecology (how man interacts with his environment), basic economics and other disciplines which are vital to understanding people's problems and helping them to overcome them. There is no lack of raw, unchanneled concern in the young today, and there never has been. The trick is to channel it effectively to produce results. This can be taught, and will be taught in the new specialty of family practice, via formal training in the behavioral sciences and the informal, but far more meaningful, vehicle of experience with patients in the family practice unit.

So, if the basic practical difference between the future diplomate and the average good fam-

ily physician today is one of developmental evolution, how then is this new doctor defined within the total spectrum of medicine?

A working definition devised by the academy and based on the "essentials for residency training in family practice," reads thusly: the specialist in family practice will be an examination-certified family physician who:

1. Serves the public as the physician of first contact and as the means of entry into the health care system;
2. Evaluates his patients' total health needs, provides personal medical care within one or more fields of medicine and refers patients when indicated to appropriate sources of care while preserving the continuity of his own care;
3. Develops a responsibility for his patients' comprehensive and continuous health care and acts as a coordinator of his patients' health services, and
4. Accepts responsibility for his patients' total health care, including the use of consultants, within the context of their environment — the family or comparable social unit and the community.

A simpler, but more inclusive set of related definitions read: "Family medicine is a body of knowledge or science comprised of the principles and techniques for comprehensive and continuing health care maintenance of families. Family practice is the application of these principles and techniques. And the title family physician refers to the doctor who assumes responsibility for such medical management."

This new physician is more concerned with people than with things, and he sees medicine as a means to helping his fellow man. He views himself more as an "artist" in dealing with others and their problems, rather than as a "scientist" dealing with disease processes though he has great respect for the values of science. However, he sees it as a means to an end rather than an end in itself. He probably is more concerned with his community as a whole than many of his colleagues because, to him, the community is an extension of his patient-family units and, in a sense, a "laboratory."

Thus, if these definitions and descriptions are accepted, this new kind of medical service might be classified as the niche for the young doctor who does not flinch from medical challenges,

trusts his own judgment and common sense and is confident in his ability to do a good job of medicine. Of course, the three-year graduate training requirement must inculcate an expertise worthy of this self-confidence and of the confidence of his medical peers and patients alike. I envision that with this type of medical educational preparation there will emerge the strongest, most reliable, most demanded physician medicine has known. This will not be the place for the weak, or those not truly dedicated to be deeply involved with people; this will be the place for outstanding leadership, strength and confidence. We have, for too long a time, failed to instill confidence and strength in our students and graduates. They have been like the swimmer who has mastered every stroke and every breath control, and yet is afraid to jump into deep unknown waters. Let us teach our students sound, scientific medical fundamentals, coupled with the confident understanding of people, and they will jump into deep unknown areas of the village, the city, the community, the ghetto.

The comprehensive examination will be the final guarantee of competence, in that it will measure a representative spectrum of his working understanding of the body of knowledge rapidly being codified in the field of family medicine.

This brings up another subtle but salient feature of the new specialist: he must be a medical "thinker" as well as a "doer." His direct professional forbear—the general practitioner—often has been categorized as medicine's "doer." This new family specialist, however, must contribute to the newly evolving body of knowledge as well as utilize it. It is essential that he and his family practice colleagues apply creativity, to the discipline, and report their creative efforts, in order to give the discipline vitality and progressive impetus. Family practice is the least didactic of all medicines' specialties and, therefore, requires at least as lively a professional literature as the others, in terms not only of quantity but of quality. We need research. We need to develop an optimistic, pioneering philosophy, with courage to probe the difficult and the unknown. We must discard the age old attitude of the family physician as an unscientific bedside manner specialist. We need to hold our heads high. We need to appreciate that with recognition there is an associated responsibility and that we must

make our contribution toward the overall welfare of medical science. We must recognize the urgency of this effort and should now prepare ourselves to give this effort high priority.

An important aspect of this requirement to vitalize the discipline is the development of competent teachers of family practice at both undergraduate and graduate levels. If the specialty is to flourish, and take its place alongside the others in the academic sphere, it must have a cadre of highly competent, impressive teachers capable of holding their own with the *dons* of medical education. They must be not only *in* medical education but *of* it. The new specialist must not only be a master practitioner but also be capable of becoming an accepted teacher of family practice.

When will this new specialist emerge? Obviously, residency-qualified diplomates are the true heirs of the efforts to establish a certifying board in family practice. They are the standard-bearers of the future. They are the ones who will build the specialty into a dominant force in medicine. But they probably will not begin to emerge in any significant numbers until the mid-1970's or later.

Undergraduate and graduate training programs must be fashioned in far greater numbers than now exist. More medical educators must be won. A reasonable number of students at all levels are inclined now toward this kind of medicine, but they must be given the vehicles to exercise their inclination. Much is being done, but much more needs to be done. Time is required.

Meanwhile, another category of potential diplomates has just taken the examination. This is the practice-eligible group of established physicians, generally from the ranks of general practice. You and I — will form the vanguard of the new primary care specialty. We will bear the burden of the organizing years. Our role is of paramount importance now, but will give way gradually to the residency-trained group as they succeed in developing numbers of quality training programs capable of producing more and more residency trained diplomate candidates. The practice-eligible category, indeed, will cease to exist in about ten years. Meanwhile, however, the working general practitioner who has been in practice a minimum of six years and can prove satisfactory completion of at least 300 hours of

acceptable continuing study, and the educator who has been engaged full-time in medical teaching for at least six years, are eligible for certification.

If we achieve an acceptable grade, we will be accorded diplomate status by the new board. In the case of academy members, membership for a minimum of six years (two consecutive re-elections) is considered satisfactory qualification. No one will be certified without satisfactorily passing the examination.

Where will the new specialist establish himself? Family practice will become the most universal specialty, in terms of broad-scale need and flexibility of operation. Consulting specialists are vital, as are hospitals or medical centers, but the scope and diversity of this specialty will enable it to be practiced in different ways in different areas, according to the requirements of the area. Consequently, the specialist in family practice will be capable of practicing virtually anywhere, without the taut lifelines to medical centers required by many limited consultants. He will need reasonable access to consultants and centers, but only that access attainable via car, helicopter or available electronic means. His range of procedures will be dictated by his access to available consultative service. The scope of his training will operate in the manner of a bellows—where he does more, he will be trained to do more. The governor will be the needs of his patient-families.

This flexibility will enable the primary-care specialist to function in the small city or town on much the same basis as the current general practitioner. And, with much greater numbers of these men expected to emerge in the reasonable future, there is reason to suspect that the current serious shortage of physicians in sparsely populated areas may begin to take care of itself. Of course, a town's ability to attract a doctor involves other factors than just the number of potential patients—it is dependent, too, on availability of suitable educational and cultural facilities for the doctor's family, satisfactory nearby recreational areas and other personal-satisfaction features.

I have noted then, that the primary distinction of the specialist in family practice is an approach to medical practice in which the patient is considered as a whole and as a human being in the context of his life situation, within an atmos-

phere of concern. Some elements of this attitude's genesis have been noted, including the fact that it, or elements contributing to it, will be taught in the undergraduate and graduate phases.

The "essentials" that will govern the residency programs set forth two main guidelines:

1. The resident's base of practice will be in a model family practice unit, where he will usually spend an increasing portion of each day. Over the three-year period a major portion of his training will be devoted to this aspect of the field.
2. In addition, education and supervised training in the following disciplines should be available during the three-year period: medicine, pediatrics, surgery, obstetrics-gynecology, psychiatry, community medicine and other electives.

The family practice unit, the vehicle for achievement of practical knowledge, is absolutely necessary. It should consist of a clinical service, with content determined by the needs of the participating family practice residents, and the needs of the community that the unit serves. Patient composition of the service should be such that continuity of care would be a reasonable probability for most patients, and continuity of experience by the resident would result. The patient population should be from a complete spectrum of social and economic strata. Where feasible, efforts should be made to bring undergraduate students into the unit to function under the family practice residents' observation and direction.

At this stage of our development, we encourage varied pilot programs. It is for this reason that to the casual observer there may appear to be confusion. This however, is not so, for what is really happening is that we are searching for the best method to get to the single goal we all have in common, that is, how best to train the family physician for his special responsibilities. Already some encouraging common denominators are being observed, but additional time is needed to have a clearer overall direction of approach.

If the numbers of practicing physicians who are taking various courses, such as those the Connecticut and Ohio chapters are sponsoring, to prepare themselves for taking the board examination, and if the number of inquiries for in-

formation about the boards and the examination from academy and non-academy members, and if the number of inquiries in regard to questions of whether this or that combination of residency training will make them eligible to take the board examination are any indication of the numbers who will be taking this examination, then I would say that the immediate interest in the boards is very high. Actually, over 4000 applications were received and 2000 took the examination. Already much interest is being generated for the second examination which will probably not be given until February 1971 or thereabouts.

I believe the practicing physicians who successfully pass this examination will be mostly those general practitioners who by hard and long experience have schooled themselves in the ways of family practice and who have kept up their modern medical knowledge by meaningful post-graduate education. These will be top notch, first class specialists in family medicine who have proven the depth of their medical knowledge by submitting themselves to examination. They will not be second class specialists for their proven knowledge is supported by years of successful practice, and what better way is there to evaluate any profession?

But, how about the long range view and prospects? *We think they are great!* We base this on the most important reliable index of projection that is available — and this is *consumer demand*. From every corner of this country, from small, medium and large communities, from every conceivable medical care setup, from hospitals, from medical centers and from medical schools, there

is an ever-increasing demand for this new type of physician.

This large consumer demand, coupled with the increasingly apparent commitment of our youth to serve their fellow man, will swell the ranks of those who will seek this avenue of medical dedication.

Whether the ranks will continue to swell will depend entirely on the increasing dedication of medical schools toward this concept — on the increasing numbers of high quality relevant residency training programs that we can establish — on our ability to include the teacher and the student into our planning and policy-making — and finally, on how well there develops a spirit of cooperation and good will among the various disciplines and elements of organized medicine, who are needed to make this concept work.

For the moment and probably for as long as we can see into the future, the primary drive and effort to accomplish these goals will have to come from the American Academy of General Practice, through the strong support of its individual membership. There is no other single organization in existence today capable of this task.

It's a big task, that will require a rearrangement of priorities and a renewed dedication, but it's a worthy task, because the AMA's Council on Medical Education has stated repeatedly, "The need to fashion a true specialist in family practice, a new kind of highly competent, comprehensive, primary care physician, in sufficient numbers to serve the American public, is the most important basic order of medicine's business today."



Surgical Treatment of Acute Necrotizing Pancreatitis

D. W. Lawson et al (Massachusetts General Hosp, Boston 02109)

Ann Surg 172:605-617 (Oct) 1970

A group of 15 patients with severe pancreatitis treated surgically is reported. Many of these patients had hypocalcemia and shock prior to operation. Except for two patients explored for diagnostic uncertainty, all patients either required endotracheal intubation for respiratory

distress or pressors for blood pressure maintenance prior to surgical intervention. The operative program consisted of tube decompression of biliary and gastrointestinal systems by cholecystostomy, gastrostomy, and jejunostomy. Multiple intraperitoneal drains and sump drainage to peripancreatic and retroperitoneal areas were placed. Mortality in this group was 26%. All four patients who died succumbed to late sepsis, and in the three examined by autopsy essentially complete pancreatic necrosis was found.



SURGERY at the UNIVERSITY OF ARKANSAS SCHOOL OF MEDICINE*

*Under the direction of Gilbert Campbell, M.D., Professor of Surgery.

Urethral Trauma

John F. Redman, M.D.*

Trauma to the urethra occurs primarily in males. In the adult male the urethra is approximately 24 centimeters in length from the vesical neck to the urethral meatus. From the meatus to the perineum, it pursues an almost subcutaneous course, being contained in the vascular corpora spongiosa.

Injuries may be extrinsic or intrinsic in origin. The intrinsic injuries all too often are iatrogenic. Urethral injuries are seen following car wrecks in which the bony pelvis is fractured, particularly the pubic rami or pubic arch. These tears may give incomplete or complete tears of the urethra, and occasionally complete shearing of the urethra at the level of the membranous urethra will occur. "Straddle injuries" or "picket-fence" injuries frequently cause urethral laceration, hematoma, and extravasation of urine.

Intrinsic injuries occur with the traumatic introduction of a foreign body into the urethra. The simple act of passing a catheter may produce tearing of the delicate urethral mucosa. This trauma is magnified with the presence of a previously existing stricture when the distal mucosa is more friable than the dense proximal stricture and the physician unknowingly exerts undue force with his instruments. The instruments to be most incriminated in this regard are catheter guides and urethral sounds.

As with many pathologic states, the key to diagnosis is suspicion. Urethral trauma must be

considered in any patient with multiple trauma, particularly if pelvic instability, pelvic fracture, local injury to the genitalia, or hematuria is present.

The diagnosis of urethral injury is made quite simply by means of a retrograde urethrogram. The technique consists of placing the patient in an oblique position if possible and instilling approximately 15-30 cc. of contrast media into the urethra using an asepto syringe. A radiographic exposure is made simultaneously. The contrast to be used is one which may be used for intravenous pyelography or angiography because intravenous injections through the corpora spongiosa usually occur.

The treatment depends on the extent of injury. Minimal tears of the urethra require no further treatment other than observation and preferably antimicrobial coverage. The "catheter chill" which occasionally accompanies a traumatic catheterization or instrumentation is in essence evidence of bacteremia. Frank urethral tears through the corpora spongiosa should be drained by cutaneous incision but may be splinted by a small catheter which will also provide for urinary diversion.

It is well to remember that it is bad to have caused urinary extravasation, but it is much worse to let it go unrecognized.

The sequelae of urethral trauma may be stricture formation; and, therefore, follow-up is advisable.

*From the Division of Urology, University of Arkansas Medical Center, Little Rock, Arkansas.



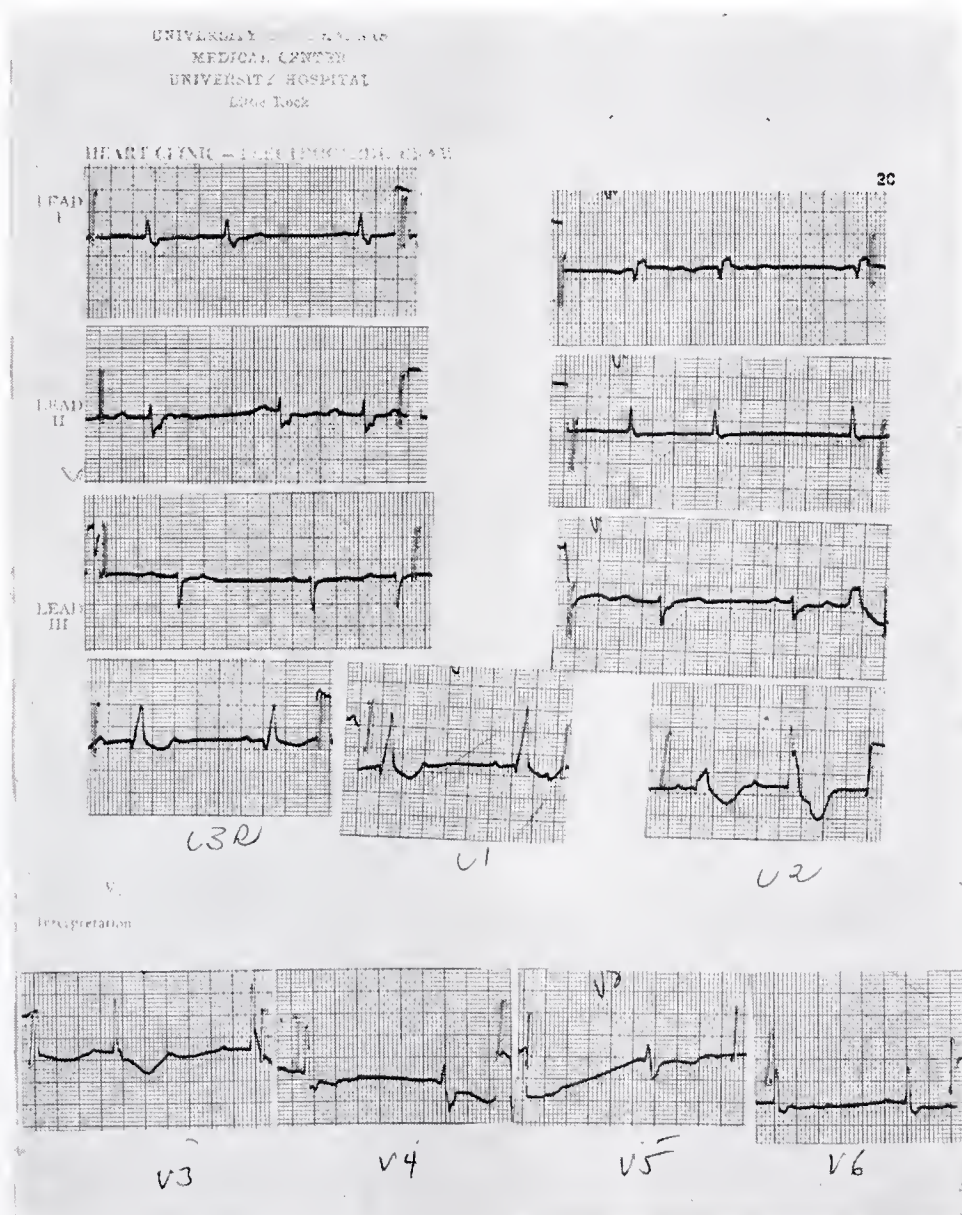
ELECTROCARDIOGRAM

OF THE MONTH

AGE: 64 SEX: Male BUILD: Medium BLOOD PRESSURE: 140/70
CARDIAC DIAGNOSIS: A.S.H.D.
OTHER DIAGNOSIS: BPH—Benign prostatic hypertrophy
MEDICATION: None
HISTORY:

Patient with history of angina of approximately 2 years duration. He has done well until, prior to admission, at which time he experienced a syncopal episode. He presented to the University of Arkansas Medical Center Emergency Room and had this EKG on admission to the CCU.

See Answer on Page 84



The Division of Cardiology, University of Arkansas Medical Center
A. J. Thompson, M.D.



PUBLIC HEALTH AT A GLANCE

Home Health Service of Arkansas State Department of Health

Did you know that bedside nursing care is available to your patient in his home for almost every county in Arkansas?

This service first became a part of the local public health nursing (county nurse) program in Arkansas less than six years ago but it is not a new practice in the United States. As long ago as 1898, the first official agency employed a nurse to give care to the sick in his home.

We may call it optimum care, progressive patient care or continuity of care, but the main purpose for this referral is to help meet the medical needs of the patient. It also saves the busy physician's time by coordinating care and having the nurse report any change to him. Having skilled procedures available in the home can shorten the time that a patient must remain in an institution and permit the family to "cope" in its own environment. Care can be given when *all* the following conditions are met:

1. the *patient's physician gives written orders* for the service (nursing or physical therapy) and reviews them at two-month intervals if plan for care is to continue
2. the patient is confined to his home by his illness and desires the services of the nurse or physical therapist
3. nurse determines that care can be safely given in individual patient's home
4. there is a responsible person in the home to supplement the intermittent skilled nursing

Examples of services performed at the *physician's written request* are:

1. dressings
2. irrigations (wounds, colostomy, bladder)
3. new colostomy care and teaching
4. indwelling catheters (care and management)

5. decubitus ulcers
6. medication (no intravenous medication is permitted by Agency Policy)
7. teaching insulin injections and special diets
8. physical therapist evaluation, treatment or teaching by registered physical therapist

The above list suggests that teaching the patient or family member is a progressive part of the program. As the patient becomes more independent or the family assumes greater responsibility, the nurse is able to space her visits or withdraw her services to serve others who have more acute needs.

Disposable sterile equipment such as catheter trays, catheters, dressings and synthetic sheep skin simplifies home care and insures greater patient safety.

In counties where most effective use is made of this service, there is a referral system from hospital rounds, utilization review, nursing homes and doctor's offices.

If there is a full time public health nurse in your county, contact her for details or for more information you may contact Nursing Division, Arkansas State Department of Health.





EDITORIAL

Cirrhosis and Renal Function

Alfred Kahn, Jr., M.D.

Cirrhosis of the liver, in common with some other serious liver disorders, may be associated with important renal disorders. For example, bile nephrosis was a not infrequent diagnosis on autopsy protocols in the past. Much has been written in previous years about so-called hepato-renal syndrome. Better understanding and more refined research techniques have led to a more precise understanding of the liver-kidney relationships. Interesting new papers on this topic are appearing regularly.

Renal tubular acidosis has been discovered in some cases of cirrhosis by Shear, Bonkowsky, and Gabrizda (New England Journal of Medicine, Vol. 280, p. 1, Jan. 2, 1969). Renal tubular acidosis is a kidney disease manifested by an inability to acidify urine, which in turn results in hyperchloremic acidosis. The urine pH seldom falls below pH6 in this tubular disorder and the urine turntable acid is diminished; another characteristic is that a larger than customary amount of urinary acid is excreted as ammonium. The blood chloride is increased and the blood bicarbonate has a corresponding reduction. Later in this disorder, there is an elevation of the blood urea nitrogen, creatinine, etc. There is often a high output of urine phosphorus and a low plasma phosphorous; the calcium in the urine is elevated; the blood potassium is often low.

Shear, et. al., found that some of their cases of cirrhosis had hypokalemia which did not seem to be the result of diuresis. As a result, they studied 15 cases of cirrhosis and three controls to discover the cause of the hypokalemia. Urinary acid studies were made on a fixed diet and after giving calcium chloride solution; ammonium chloride and hydro-chloric acid were given

a limited trial. Urine and blood samples were collected over a period of days.

The tests, after acid loading, revealed the urinary pH fell to pH 4.8 to pH 5.01 in the controls; four patients with cirrhosis had urinary pHs in this normal range; two cirrhotics had an equivocal response; nine cirrhotic patients' urine pH fell less than normal and were in the range of pH 5.79 to pH 6.73. In the controls, the plasma chloride increased from 105 M.E. to 109 M.E.; three cirrhotics had a similarly normal response while nine showed an abnormal response with an increase from 103 M.E. to 110 M.E. Mean loss of chloride in the urine for the control showed an increase from 25 to 128 in the controls, 20 to 112 in three cirrhotic cases with normal response, and 10 to 100 M.E. in the cirrhotic cases with abnormal response. The pH in these three groups changed respectively as follows: pH 7.37 to pH 7.29, pH 7.40 to pH 7.35, and pH 7.4 to pH 7.35. The mean carbon dioxide content in M.E. per liter changed for the three groups: 28 to 23, 23 to 19, and 23 to 18. The cirrhotic patients with tubular defects had an increased output of ammonium in the urine at the various levels of pH as compared to the controls and three cirrhotics with normal renal function. Six of the nine cirrhotic patients with faulty tubular function did not retain potassium properly; this was not noted in the others. Shear found that these patients with renal tubular malfunction had an enhanced tendency to hepatic precoma. The authors did not feel the tubular defect of cirrhosis was dependent on renal hemodynamics.

Ajzen, Andrade, Cipuelo, Sustovich, and Ramos have also reported on electrolytes in hepatic disease in an article entitled, "Effect of

Angiotensin II on Urinary Sodium Excretion In Normal Subjects and In Cirrhotic Patients" (American Journal of Medical Sciences, Vol. 256, p. 373, Dec. 1968). The study consisted of investigating the effects of subpressor doses of angiotensin II on urinary sodium excretion on 5 normal subjects and 10 cirrhotic patients on both low and normal sodium diets. Angiotensin II in the 5 normal subjects did not result in any abnormality of glomerular filtration rate or proximal sodium load. Angiotensin did lower the urinary sodium output and the distal sodium load; the free water clearance was reduced. Subpressor doses of angiotensin infused into 10 decompensated cirrhotics reduced the glomerular

filtration rate, the proximal sodium load, and a very large decrease in the urinary sodium output and free water clearance; the effective renal plasma flow was decreased. Hypertensive doses of angiotensin, when given to 7 decompensated cirrhotic cases, reduced the glomerular filtration rate and the proximal sodium load. It was interesting that the drug reduced the urinary sodium in four patients and had an opposite effect in the other three; renal plasma flow was reduced and the filtration fraction remained the same. The authors have speculated that these changes may represent variations in the renal blood flow in comparison to the rest of the body when angiotensin is administered.



O B I T U A R Y

Dr. Charles W. Reid

Dr. Charles W. Reid of Pine Bluff died May 14th, 1971, after an illness of several weeks. He was fifty-five years of age.

Dr. Reid graduated from the University of Arkansas School of Medicine in 1939. He then moved to Louisiana where he was associated with the Public Health Department and later was Dean of Public Health at the Louisiana State

University in Baton Rouge. In 1942, Dr. Reid moved to Pine Bluff, where he practiced medicine until the time of his death.

Dr. Reid was a member of the Jefferson County Medical Society, the Arkansas Medical Society, the American Medical Association, and the American Academy of General Practice. He served on the Jefferson County Board of Health, the Police Pension Board, and on the Blue Cross-Blue Shield Board of Trustees for eighteen years.

Dr. Reid was a World War II veteran, a Mason, and a member of the Grace Episcopal Church.

He is survived by his wife, Frances, a son, and four daughters.

Dr. William Bruce Ellis

Dr. William Bruce Ellis died suddenly on June 7th at the age of forty-five.

He graduated from the University of Arkansas School of Medicine in 1952 and had practiced in Stephens, Arkansas, since then.

Dr. Ellis was a member of the Ouachita County Medical Society, the Arkansas Medical Society, the American Medical Association, and the American Academy of General Practice. He was president of the Stephens School Board and a director of the Stephens Security Bank. He was a veteran of World War II and served as president of the Baptist Brotherhood at Stephens.

Dr. Ellis is survived by his wife, Nancy Ann, four sons, two daughters, one sister, and two brothers, one of whom is Dr. Joseph L. Ellis of Camden.



ANSWER—Electrocardiogram of the Month

RATE: Approximately 55/min. RHYTHM: Sinus

PR: Varying QRS: 0.12 sec. QT: 0.36 sec.

SIGNIFICANT ABNORMALITIES:

Left anterior hemiblock—QRS axis -60° ; slightly prolonged QRS duration.

RBBB—QRS duration 0.12, terminal broad S in I, V_1 , upright broad R in right precordium ($V_3R.V.$).

Wenckebach—Note progressive increase in P-R interval leading to a dropped beat (classical 3:2 pattern).

INTERPRETATION: Abnormal ECG

2nd° A-V block (Mobitz I or Wenckebach)

Right bundle branch block

Left anterior hemiblock

Occasional PVC—Premature ventricular contractions

MEDICINE IN THE



THE MONTH IN WASHINGTON

The speaker of the American Medical Association's House of Delegates has warned against exaggerated claims that national health insurance is the total answer to the nation's health care problems.

Testifying before the Senate Finance Committee, Russell B. Roth, M.D., Erie, Pa., said the medical profession as represented by the AMA is "concerned by the over-promise which seems inherent in a wide variety of legislative proposals placing strong reliance on a restructuring" of the health care delivery system in this country.

"We caution against the attractive but totally impractical notion that one legislative act can solve the problems (as to health care) of a profoundly troubled society," he said.

"We commend to you our specific proposal, (Medicredit), for attacking financial barriers. We also solicit your support in ongoing efforts to augment manpower, to improve practice patterns, to apply effective measures to moderate and contain costs, to meet the challenges of the inner-city and the rural scene, and in general to meet the goal that no one shall be deprived of the best health care that is within our power to provide."

"Those of us who are in group practice, and there are over 40,000 of us, have our own concepts of its advantages to our patients and to us," Dr. Roth said. "But few of us look upon group practice as a panacea. The notion has been advanced that the AMA opposes salaries for physicians and champions direct fee-for-service alone. This would come as news to our large number of member physicians who derive their income in whole or in part from salary. It is a false premise. Upon it is based the allegation that fee-for-service favors over-treatment and pre-payment does not. One might as logically assert that pre-payment favors under-treatment. Actually a good and conscientious physician responds with consistency to the needs of his patients as he sees them.

"One hears over and over the statistical studies to show reduced utilization rates under pre-payment. But less prominence is given to other studies such as that by the Russell Sage Foundation which concluded that nearly half of all members of the Health Insurance Plan of Greater New York and also of the Labor-Health Institute go outside of the plan for some medical service. It is not our aim to downgrade pre-paid practice. Many physicians, as well as many patients, like it. Under the Kaiser plan, only some 15 percent of beneficiaries who have opted into pre-payment coverage, opt out of it later on. But mark you, they do have an option.

"It is implicit in our defense of a pluralistic flexible system, that pre-paid group practice and such modifications of it as may be devised under the title of health maintenance organizations should have their opportunity to demonstrate their capacities to provide effective, efficient and economical care. Any freeze into a single mold would deprive our nation of the benefits of competition and comparison. Here, legislative mandate can do more harm than good.

"In a somewhat similar vein of caution we would note that there is danger in expecting too much of professional services review or peer review. To attempt to legislate it into effective being may be a frustrating experience. The frustration stems from the fact that when the question concerns the appropriateness of technical, medical care and the equity of charges for it, only other physicians can pass the judgment. This is a fact which is forcing upon physicians the obligation to evaluate the practices of their colleagues. Large segments of the medical profession take substantial pride in their accomplishments in this respect.

"In applying the principles of peer review the reviewing group seeks to uphold quality, to promote efficiency, and to eliminate departures from accepted practices and equitable charges. By and large, practicing physicians accept the necessity for checks and balances in the paying out

of public funds and private funds as well. On the other hand, they have no appetite for the job to be done by non-medical persons or agencies ill-equipped to judge. This is why they are willing to redouble their efforts within their professional organizations to do the job well. We know of no successful efforts to legislate ethics or morals, which must be at the heart of any system of competent, conscientious delivery of medical care. On the other hand, we know of no profession which has shown a better motivation or performance through its collective professional organizations to rule out abuses and lack of competence. It is of paramount importance to support the progress which has been made, not to cast it aside.

"We would also caution against uncritical acceptance of the statement that it is somehow possible to legislate American medicine into a system of 'health care' as opposed to 'sickness' care. The great advances in adding to life expectancy have been achieved in world medicine by controlling epidemics and plagues, draining swamps, purifying water and devising immunizations. Smaller gains have been made in individual physician-patient encounters, removing diseased organs, supporting failing hearts, controlling diabetes, and the like. Few gains, indeed, have been made or can be made through changing the role of the physician in respect to well patients. Not that there is any shortage in things to be done, especially in the realm of public education. Nutrition can be vastly improved, cigarette smoking can be curbed, drug addiction and alcoholism somehow must be abated, proper exercise may be promoted, accident prevention is essential, environmental deterioration must be reversed. But how many of these things can be done by the individual physician, besieged as he is by those who are or think they are already sick?

"The things that are to be done are the province of our public health organizations, voluntary health agencies, communications media, government, and our professional educational associations such as the AMA. All physicians practice some degree of preventive medicine. Many could do more. But to believe that some sort of basic restructuring of medical practices could yield great dividends in this respect is wishful, impractical thinking."

* * *

The American Medical Association urged that the Food and Drug Administration modify a proposed new policy on the continuation of marketing of combination drugs.

In testimony before the House Health Subcommittee, John R. Kernodle, M.D., Burlington, N. C., vice chairman of the AMA Board of Trustees, said:

"We recommend that all preparations judged by the Drug Efficacy Study as 'effective' and 'probably effective' should remain on the market; that all drugs judged 'ineffective' be removed from the market; and that the drugs categorized as 'possibly effective' be reviewed by clinically experienced consultants to the FDA, within a period of one year (instead of the allowed six-month period), to determine if further scientific evidence supports continued marketing."

"The drugs categorized as 'effective, but' have been resubmitted to the National Academy of Sciences — National Research Council panels and, accordingly, we recommend that no action should be taken with respect to this group until that review has been completed.

"Many of the mixtures categorized as 'ineffective as a fixed combination' are commonly prescribed and judged by physicians and patients as highly satisfactory. To summarily remove all such preparations would result in dismay and inconvenience for a large segment of the public. Therefore, we recommend that preparations designated as 'ineffective as a fixed combination' should be re-evaluated by practicing physicians who are qualified as clinical specialists.

"We reaffirm our belief that continuing professional education through AMA-Drug Evaluations and scientific journals is the method of choice for improving prescribing practices of physicians, and that the physician should continue to have the fullest armamentarium of drugs for treatment of his patients."

Dr. Kernodle said the medical profession was concerned with the effect that the proposed new FDA policy would have on medical practice, if it not be modified.

"Many fixed dosage drug combinations which have been used by substantial numbers of physicians, without harmful or adverse reactions and with what qualified, expert clinicians judge to be beneficial effects, will be placed in jeopardy," he said. "We do not believe that patients should

be denied effective therapy which is safe, convenient and economical. Lest there be any misconception, I want to point out that the 'safety' of the drugs is not in issue, since the drugs were earlier determined by the FDA to be safe in order for them to be marketed."

In a letter to the hearing clerk of the Department of Health, Education and Welfare, Ernest B. Howard, M.D., AMA executive vice president, said:

"The medical profession is concerned with the effect the proposed statement would have on medical practice. Many fixed drug combinations which have been used by substantial numbers of physicians without harmful or adverse reactions and with what qualified, expert clinicians judge to be beneficial effects will be placed in jeopardy. We do not believe that patients should be denied effective therapy which is safe, convenient, and economical."

The American Medical Association supported legislation that would extend the federal programs of assistance for training of physicians, nurses and other health manpower.

Walter A. Sodeman, chairman of the AMA's Council on Medical Education, told the Senate Health Subcommittee that the AMA supports the continued expansion in enrollment of medical school students because "the urgent need for more physicians persists."

"To achieve expanded enrollment it will be necessary to have increased financial support from both government and private sources for the construction of additional facilities at existing schools and creation of new schools," he said. "Equally important will be increased support for the operational costs of medical schools and for education improvement and innovation which could shorten the time required for medical education."

Dr. Sodeman said that, while the AMA strongly favors continued federal financial aid for the operation of medical schools, the association believes the capitation figure should be \$3,500 instead of the proposed \$5,000. The AMA also doubts the wisdom of tying institutional grants to expansion of student enrollment, he said.

"While expansion is certainly desirable in view of the urgent need for more physicians, we have some concern about conditioning operational support to expansion," he said. "There

are currently some medical schools in severe financial straits. Some are facing the real danger of being unable to keep their doors open. These schools need increased operational support to maintain their present facilities and activities, and a requirement that they must increase the student load in order to qualify for such support may serve to defeat the purpose of the program."

American Medical Association spokesmen urged that the AMA Medcredit national health insurance program be adopted as the best way to assure the nation's poor access to quality medical care and to free families with moderate incomes from the fear of bankruptcy resulting from a long, costly illness.

Dr. Max H. Parrott, chairman of the Board of Trustees, and Dr. Russell B. Roth, speaker of the House of Delegates, represented the AMA before the Senate Health subcommittee at one of its hearings on national health insurance and major health care problems facing the nation.

They estimated the first year cost of Medcredit at \$14.5 billion, much less than some proposals before Congress that would have the federal government virtually take over the nation's health care delivery.

The Medcredit legislation (H.R. 4960 and S. 987) has been introduced in Congress with 131 Democrats and Republican members as sponsors.

Dr. Roth said that Medcredit, "without disturbing the present medicare program for the elderly . . . makes available to everyone under 65 a private program of comprehensive medical and health care protection, covering both the ordinary and the catastrophic expenses of illness or accident."

Dr. Parrott warned against legislating revolutionary changes in health care delivery. He urged that innovations be tried on an experimental scale instead.

"The American medical-health care system needs something more than a poultice, but something less than a burial," he said.

"The AMA believes we can bring about needed improvements without gambling on a whole new medical-health care system whose effects and effectiveness are unpredictable. . . . The American doctor is sincerely concerned over the prospect of any sudden, single, massive un-

evaluated experiment which would cast all 200 million Americans in the role of the guinea pig."

Dr. Parrott also testified that many health problems would respond best to programs that are not purely medical.

"Our fat standard of living creates health problems," he said. "We ride in cars when we should be on a bicycle or on foot. We overeat. We overdrink. We smoke cigarettes. This affluent life style relates directly to the accident rate, the principal killer up to middle age, and to heart diseases, the principal killer after middle age."

Speaking as a practicing obstetrician, Dr. Parrott pointed out that infant mortality rates in this country are not entirely a medical problem. They are linked closely to malnutrition and other conditions of poverty, particularly in urban ghettos, he said.

"If we could create a broad program that would bring dignity into the lives of people in our slums, if we could create a world every mother wanted to bring her child into, that would do more to improve infant mortality than a hundred Mayo clinics," he said.

* * *

The chairman of the AMA's Council on Rural Health told the Senate Health Subcommittee that a variety of new health programs are needed to solve the problems of health care in rural communities.

The AMA spokesman, Leopold J. Snyder, M.D., Fresno, Calif., said some of the new programs already are being tried.

"Experience indicates that no one approach will solve the health needs of every community. Any attempt to find single causes for these health problems, or simple solutions to them, is bound to result in total frustration.

"While medical solutions are being sought, we believe that the root causes to these problems — largely socio-economic in character — should be identified and resolved."

Dr. Snyder explained to the subcommittee that while large segments of people in rural communities have access to quality health care, there are still large segments which do not.

"In some instances," he said, "these people live in remote localities, far from the nearest health center. In other cases, their lack of adequate health service can be attributed to reasons

of economics, immobility, cultural attitudes, and a host of other causes.

"Whatever the reason, the American Medical Association believes every person should have access to adequate health care, whether he lives in a city, or some remote rural region, regardless of his economic circumstances.

"Doctors are aware of the need for better health care in rural communities. Together with other groups and organizations, we are actively developing new approaches to the problems."

Among the new programs under study by the AMA, he said, are:

— In Seattle, the University of Washington is providing former medical corpsmen with a three-month refresher course on civilian medical procedures. Upon completion of the course, these former medics are sent to physicians across the state, who have agreed to act as their preceptors, and to employ them after 12 months of on-the-job experience. Some of these men are already on the job, mostly in rural communities. This Medex Program, as it is called, is supported by the Washington State Medical Association and its Education and Research Foundation, as well as the AMA's Council on Rural Health.

— In Lawrence County, Ala., another project also involves the services of former medical corpsmen. In this Appalachian area, there are only six physicians to serve a population of 30,000. Basically, the project has two modes of patient contact — a family care unit and "out-reach" teams. The out-reach teams introduce families to the community health service personnel, who can then begin the history-taking process and refer the family to the family care unit.

— In southern Monterey County, Cal., a small population is increased to 23,000 by a seasonal influx of migrant farm workers. A group of 10 physicians and 80 supporting ancillary staff members have undertaken to provide medical care to all eligible residents, including migrant farm workers. Patients are cared for in the same facilities, by the same medical staff that serves the self-sustaining members of the community. Transportation — including a van, equipped for wheelchair patients — serves the entire project area. Grantee for the project is the Monterey County Medical Society with funds from the Office of Economic Opportunity.

—Another significant approach may soon be attempted in the wilderness of southwestern New Mexico. This is a 50,000 square mile region of high mountain ranges and portions of the Chihuahuahua and Sonora Deserts. Some 95,000 inhabitants of the region are served by only three physicians.

The program here calls for a central health center and a series of remote health stations. The stations will be staffed by persons trained in health care, but not as highly trained as a physician. They will be equipped with sensors, similar to those used by the National Aeronautics and Space Administration to monitor the health of the astronauts. Thus, a patient visiting one of the remote health stations will have attached to himself the electronic sensors, which will transmit heartbeat, respiration, blood pressure and other vital data to the computer-controlled center, where a physician would monitor the symptoms and advise the allied health staffer by radio.

* * *

President Nixon, saying that he personally opposes abortions as "an unacceptable form of population control," rescinded a Pentagon order liberalizing the policy on abortions in military hospitals.

His statement on abortion, issued at the Western White House at San Clemente, California, said:

Historically, laws regulating abortion in the United States have been the province of states, not the Federal Government. That remains the situation today, as one state after another takes up this question, debates it and decides it. That is where the decisions should be made.

Partly, for that reason, I have directed that the policy on abortions at American military bases in the United States be made to correspond with the laws of the states where those bases are located. If the laws in a particular state restrict abortions, the rule at the military base hospitals are to correspond to that law.

The effect of this directive is to reverse service regulations issued last summer which had liberalized the rules on abortions at military hospitals. The new ruling supersedes this—and has been put into effect by the Secretary of Defense.

But while this matter is being debated in state capitals, and weighed by various courts, the

country has a right to know my personal views.

From personal and religious beliefs I consider abortions an unacceptable form of population control. Further, unrestricted abortion policies, or abortion on demand, I cannot square with my personal belief in the sanctity of human life—including the life of the yet unborn. For, surely, the unborn have rights also, recognized in law, recognized even in principles expounded by the United Nations.

Ours is a nation with a Judeo-Christian heritage. It is also a nation with serious social problems—problems of malnutrition, of broken homes, of poverty and of delinquency. But none of these problems justifies such a solution.

A good and generous people will not opt, in my view, for this kind of alternative to its social dilemmas. Rather, it will open its hearts and homes to the unwanted children of its own, as it has done for the unwanted millions of other lands.

* * *

New government regulations for Medicaid include a requirement that the physician certify a patient's continuing need for inpatient care on or before the 12th day of hospitalization and again no later than the 18th day.

Other final regulations issued by the Department of Health, Education and Welfare give the Internal Revenue Service more power to police income earned under the Medicaid program. States must file annual information returns showing aggregate amounts paid to providers of services identified by name, address and social security number or employer number.

HEW officials said the new regulations on hospitalization certification are expected to reduce Medicaid expenditures by cutting down on the time spent by patients in hospitals.

"Experience with Medicare has shown that requiring certification or recertification by physicians reduces hospital stays significantly," John Twiname, administrator of HEW's Social and Rehabilitation Service, said. "Applying this requirement to Medicaid can cut its costs without lowering the quality of care."

Inpatient hospital costs have been accounting for about 40 percent of total Medicaid expenditures, or about 1.9 billion dollars in the fiscal year 1970.

UAMC Anesthesiology Department Approved

The Department of Anesthesiology at the University of Arkansas Medical Center has been approved for a three-year residency program by the American Medical Association beginning July, 1971.

The department previously has been approved for a two-year program, but it was necessary for a resident physician to go out of the State to complete the three-year anesthesiology residency.

Dr. F. E. Greifenstein is head of the department.

Physicians' Telephone Listings

The following information was taken from the *AMA Newsletter*, Volume 3, Number 21.

"A physician's telephone listing should be followed by "MD" but not by the abbreviations "SC" (service corporation), "PA" (professional association) or others intended to describe the corporate nature of his practice, the AMA's Judicial Council has recommended. In 1966, the Judicial Council and the American Telephone and Telegraph Company developed *Guidelines for Telephone Directory Listings* that would be helpful to the public and in keeping with the dignity of professional medical practices. Since then, there has been a trend toward incorporating medical practice and some physicians have sought to use telephone directory listings describing the business or corporate nature of their practice. Such listings are for personal, business or purported legal reasons and are not helpful to the public, the Judicial Council said. Legal experts have advised that the evidentiary value of such listings is minimal. If a physician wishes to obtain an *additional* listing to describe the business or corporate nature of his practice, this is a matter to be resolved between him and the telephone company, the Judicial Council opinion stated."

"Clinical Notes" Available

Mr. Robert Schnee, Executive Director of the Arkansas Tuberculosis and Respiratory Disease Association, advises that since "Tuberculosis Abstracts" is no longer available for publication in the *Journal*, some physicians in the State may desire to receive "Clinical Notes", the National Tuberculosis and Respiratory Disease Association's quarterly publication. Though not able to do a mass distribution to Society members, Mr. Schnee states that the publication will be sent free to any member of the Society who wishes to receive it.

Write to ATRDA, Post Office Box 3857, Little Rock, Arkansas 72203.

THINGS



TO

COME

Course To Be Given

The University of Tennessee Division of Continuing Education and Conferences and the Memphis Regional Medical Program will co-sponsor a course entitled "The Ideal Practice: Current Trends in How to Achieve It."

The course will be given August 24-26 in the Wassell Randolph Student Center at 800 Madison Avenue, Memphis, Tennessee. Among subjects to be discussed are the use of the automated medical history, physician assistants, the Weed method of record keeping, the fallacy of keeping up, use of library facilities, and computer assisted diagnosis.

Governor's Conference On Emergency Health Services

The third annual Governor's Conference on Emergency Health Services will be held September 11th at the University of Arkansas at Little Rock, immediately preceding the night Arkansas-California football game in Little Rock. Members of the Steering Committee are Dr. Raymond Irwin, Dr. Samuel Landrum, Dr. Carl Williams, Dr. Raymond Read, Dr. Robert Bransford, Mr. Tom Carroll, Mr. Bob Gorder, and Mr. Y. W. Whelchel.

Governor Dale Bumpers has been invited to open the conference, speaking on "The State's Responsibility for Emergency Health Care." Other topics for discussion are "Ambulance Service: A Public Utility?"; "Emergency Room and Its Evolution"; and "Traffic Safety — What Are We Doing?". Three workshops will be conducted during the one-day meeting. Workshop No. 1 will be "Professional Education"; Workshop No. 2 will be "Emergency Care: Whose Responsibility?"; and Workshop No. 3 will be "What Is New In Emergency Equipment and Concepts".

The following organizations have been invited to co-sponsor the Conference: Arkansas County Judges Association, Arkansas Funeral Directors Association, Arkansas Civil Defense, Arkansas

Health Planning Program, Arkansas Pharmaceutical Association, Arkansas Regional Medical Program, Northwest Arkansas Firemen's Association, Arkansas Broadcasters Association, Arkansas Sheriffs Association, Office of the Governor — Public Safety Program, Arkansas State Police, Arkansas Association of Law Enforcement Officers, Arkansas League for Nursing, Arkansas State Nurses Association, Arkansas State Licensed Practical Nurses Association, Division of Safety — Arkansas State Department of Health, Arkansas Optometric Association, Arkansas Blue Cross-Blue Shield, Citizens Traffic Safety Commission of Little Rock, Arkansas Municipal League, Arkansas Federation of Women's Clubs, Arkansas Hospital Association, Veterans Administration, University of Arkansas School of Medicine, Arkansas Farm Bureau Federation, University of Arkansas Agricultural Extension Service, American Red Cross, and Arkansas Dental Society.

Otolaryngology Course For Family Physician

The Department of Otolaryngology, University of Miami School of Medicine will present a "Postgraduate Course in Otolaryngology for the Family Physician" October 8-9, at the Sheraton Four Ambassadors Hotel in Miami, Florida. AAFP credit — nine hours. The course Director is:

F. W. Pullen, II, M.D.
Neuro-Otologic Laboratory
School of Medicine
P. O. Box 875, Biscayne Annex
Miami, Florida 33152

* * *

American Medical Association
31st ANNUAL CONGRESS ON
OCCUPATIONAL HEALTH
August 29-30, 1971
Jackson Lake Lodge
Grand Teton National Park, Wyoming



Prospective Evaluation of Vagotomy-Pyloroplasty and Vagotomy-Antrectomy for Treatment of Duodenal Ulcer

P. H. Jordan, Jr., and R. E. Condon (VA Hosp, Houston 77031)

Ann Surg 172:547-563 (Oct) 1970

Two hundred consecutive patients requiring elective operation for duodenal ulcer were studied. Operations performed included vagotomy and pyloroplasty in 94, vagotomy and gastroenterostomy in 14, vagotomy, antrectomy and gastroduodenostomy in 73 and vagotomy, antrectomy and gastrojejunostomy in 19. Immediate postoperative morbidity and incidence of alimentary dysfunction for the two groups of patients were similar. There was evidence of an incomplete vagotomy in 50% of patients after vagotomy-drainage and in 13% of patients after vagotomy and antrectomy. In the drainage group, eight patients have been reoperated on for suspected recurrent ulcer and three are under observation for possible recurrence. No patient in the vagotomy-antrectomy group has had a diagnosis of recurrent ulcer. Vagotomy and antrectomy seems superior to vagotomy and drainage as the operation of choice for elective treatment for duodenal ulcer in the majority of patients because of its lower recurrence rate without the association of increased morbidity or mortality.

Long-Term Prognosis of 160 Patients Who Survived Ventricular Fibrillation Complicating Acute Ischemic Heart Disease

B. T. McNamee et al (Royal Victoria Hosp, Belfast, Ireland)

Brit Med J 4:204-206 (Oct 24) 1970

In this study the follow-up data concerned patients discharged from the hospital following recovery from ventricular fibrillation. One hundred and fifty-one patients had an acute myocardial infarction. 80 patients had a clinically mild coronary attack. The long-term prognosis in these patients was similar to that reported for patients whose myocardial infarction was not complicated by ventricular fibrillation; 96 patients had ventricular fibrillation within 24 hours of the onset of symptoms; among these patients ventricular fibrillation had occurred within two hours in 46, and within one hour of onset of symptoms in 29. Twenty of these 29 patients had ventricular fibrillation outside hospital. Patients who survived ventricular fibrillation occurring within four hours of the onset of symptoms were younger, usually had a mild coronary attack and had the most favorable long-term prognosis. The number of episodes of ventricular fibrillation did not affect adversely the long-term prognosis. Among those eligible to work, 86% were fit to work and 68% returned to work.



NEW MEMBERS

Dr. Charles D. Daniel

Dr. Charles D. Daniel, a native of Little Rock, has been accepted for membership in the Boone County Medical Society.

He graduated from the University of Arkansas in Fayetteville in 1962 with a Natural Science Degree, and from the University of Arkansas School of Medicine in Little Rock in 1967. Dr. Daniel completed his internship at St. Vincent Infirmary, also in Little Rock.

He has been in the general practice of medicine in Marshall for two and one-half years at the Daniel Clinic on Nome Street.

Dr. Lester R. Darden

Crawford County Medical Society has added Dr. L. R. Darden to its membership roll.

Born in El Dorado, Dr. Darden attended Southern State College in Magnolia, receiving his B. S. degree in 1957. In 1961, he was graduated from the University of Arkansas School of Medicine. Dr. Darden completed his internship at Riverside Hospital, Toledo, Ohio. While in the Naval Reserve, he spent six months at the School of Aviation Medicine in Pensacola, Florida, and two years with the Medical Corps of the Air Force at New River, Jacksonville, North Carolina.

Dr. Darden is in the general practice of medicine at 12 South 6th Street, Van Buren, and is Medical Director for Crawford and Sebastian County Family Planning. Dr. Darden previously practiced for five years in Chadbourn, North Carolina.

Dr. Robert D. Bethell

Dr. Robert D. Bethell is a new member of the Cross County Medical Society. He is a native of Brinkley, Arkansas.

Dr. Bethell attended the University of Arkansas in Fayetteville and Arkansas State College, State College, Arkansas. He graduated from the University of Arkansas School of Medicine in

1963 and completed his internship at St. Vincent Infirmary.

Dr. Bethell practiced in Des Arc for five years before going to Wynne, where he is in the general practice of medicine. His office address is 303 East Union.

Dr. James R. Jacobs

Dr. James R. Jacobs, who was born in Wynne, is another new member of Cross County Medical Society.

Dr. Jacobs received his B.A. degree from the University of Arkansas at Fayetteville in 1963. He then entered the University of Arkansas School of Medicine and was graduated in 1967. Both his internship and residency in General Surgery were completed at the University Medical Center. Dr. Jacobs served in Southeast Asia while a member of the United States Navy.

His office is at 411 South State Street, Wynne, where he is in the general practice of medicine.

Dr. Patrick L. Knight

Dr. Patrick L. Knight has been accepted for membership in the Garland County Medical Society. He is a native of Hot Springs.

Dr. Knight received his pre-medical education at Little Rock University. In 1964, he was graduated from the University of Arkansas School of Medicine. He completed an internship in Pathology at the University Medical Center and stayed there for a residency in Anatomic and Clinical Pathology. He served two years in the Air Force.

Dr. Knight is in the practice of Anatomic and Clinical Pathology at 236 Central, Hot Springs. He is certified by the American Board of Pathology.

Dr. Doane M. Newton

Dr. Doane M. Newton is also a new member of the Garland County Medical Society. He was born in Stuttgart.

Dr. Newton attended the University of Arkansas in Fayetteville before entering the University of Arkansas School of Medicine for his medical education. He was graduated from the latter in 1964. His internship was completed at Hennepin County General Hospital in Minneapolis, Minnesota. His residency work in Pediatrics was at the University of Arkansas Medical Center. Dr. Newton served in the Air Force from 1965 to 1967 and served with the Peace Corps in the Dominican Republic.

His office is located at 236 Woodbine, Hot Springs, where he specializes in Pediatrics.

Dr. David Louis Barclay

Dr. David L. Barclay, a native of Everett, Washington, is a new member of the Pulaski County Medical Society.

Dr. Barclay received his medical education at the University of Washington School of Medicine, Seattle, Washington, from which he was graduated in 1955. His internship was at the Baltimore City Hospital, Baltimore, Maryland. His residency work in Obstetrics and Gynecology was done at Charity Hospital of Louisiana, New Orleans. Dr. Barclay is a member of the American College of Surgeons, Association of Professors of Gynecology and Obstetrics, Central Association of Obstetricians and Gynecologists, and numerous other professional organizations. He is certified by the American Board of Obstetrics and Gynecology.

Dr. Barclay is Professor and Head, Department of Obstetrics and Gynecology at the University of Arkansas Medical Center.

Dr. Roy Erving Harrison

Dr. Roy E. Harrison is a new member of the Pulaski County Medical Society. He was born in Casa, Arkansas and attended the Casa High School, the University of Arkansas at Fayetteville, and the University of Arkansas School of Medicine. He graduated from the School of Medicine in 1961. His internship was completed at St. Vincent Infirmary.

Since 1962, Dr. Harrison has been in the general practice of medicine at 8824 Chicot Road, Little Rock.

Dr. Robert Martin Tirman

Dr. Robert M. Tirman, who is a native of Brooklyn, New York, is a new member of the Pulaski County Medical Society.

Dr. Tirman attended State University of New York Downstate Medical Center in Brooklyn. He graduated from there in 1943. His internship was at Long Island College Hospital, Brooklyn, and he stayed on there for a residency in Obstetrics and Gynecology. Dr. Tirman was in military service from 1945 to 1969. During that time he did residency work in Urology at Brooke General Hospital, Fort Sam Houston, Texas, and residency work in Radiology at Letterman General Hospital, Presidio of San Francisco, California.

Dr. Tirman holds a teaching appointment in Radiology at the University of Arkansas Medical

Center. His office is at the Veterans Administration Hospital, 300 East Roosevelt Road, Little Rock, where he specializes in the practice of Radiology.

Dr. Clarence Lea DeLany

The Union County Medical Society has announced that Dr. Clarence L. DeLany, a native of Jackson, Louisiana, is a new member of their Society.

Dr. DeLany graduated from the University of Mississippi School of Medicine, Jackson, Mississippi, in 1959. He interned at Mississippi Baptist Hospital. His residency work in Radiology was at the University of Oklahoma Medical Center, Oklahoma City, and Baylor University College of Medicine, Houston, Texas.

Dr. DeLany holds a teaching appointment at the University of Arkansas School of Medicine. His office is located at Warner Brown Hospital, El Dorado, where he specializes in Radiology. Dr. DeLany is Board Certified.



Brain Stem Lesions Characteristic of Traumatic Hyperextension

R. Lindenberg and E. Freytag (111 Penn St, Baltimore 21201)

Arch Path 90:509-515 (Dec) 1970

Traumatic hyperextension of the head produces lesions in the brain stem which constitute a characteristic morphologic and pathogenetic entity. They consist of tears and hemorrhages in the pyramids at the junction of the medulla oblongata and pons. The hemorrhages often extend rostrally towards the tegmentum of the pons but never caudally into the medulla oblongata. The brain stem lesions may be associated with a subarachnoid hematoma from torn blood vessels at the base of the brain. Histologically, myelin sheaths of torn nerve fibers are distended from vacuolar swelling of the axoplasm or from homogeneous axonal swelling. The tears and hemorrhages originate from overstretching of the pyramids. Tetraplegia without loss of consciousness and signs of involvement of central sensory pathways in hyperextension injuries may be due to damage of the rostral pyramids.



PERSONAL AND NEWS ITEMS

Dr. Stuckey Elected

Dr. James G. Stuckey of Little Rock was elected president of the Southeastern Society of Plastic and Reconstructive Surgeons at its recent annual meeting in Sea Island, Georgia. The Society represents the states of Arkansas, Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.

At the four-day meeting, Dr. Harry Hayes, Jr., of Little Rock, presented a paper on his research with Teflon particles and its application in plastic surgery.

Fire Destroys Clinic

An early morning fire in May completely destroyed the building and contents of Dr. A. K. Busby's clinic which is located at 816 North Hyatt in Monticello.

Doctors Announce New Associate

Drs. Leonus Shedd and Omer Bradsher announce that Dr. George Collier, Jr., has joined them in the general practice of medicine at 901 West Kingshighway, Paragould.

Dr. Saltzman Elected

Dr. Ben N. Saltzman of Mountain Home was elected president of the Arkansas Association for Retarded Children at their annual meeting which was held recently in Hot Springs.

Physicians Recipients of "Golden T" Awards

Drs. L. D. Massey of Osceola, D. L. Owens of Harrison, and H. W. Savery of Van Buren were among the recipients of the "Golden T" award from the University of Tennessee Medical Units. The awards, which are presented to graduates of the school who are still active in the professions fifty years after graduation, are given in recognition of longevity of career and service in the health profession. Special recognition was given to the physicians at the school's commencement exercises in June.

Dr. Queen Speaker

Dr. George P. Queen of Hot Springs was the guest speaker at a meeting of St. Mary's Council of Catholic Men. His subject was "Prevention Factors in Coronary Artery Disease."



Association Between Polyarteritis and Australia Antigen

D. J. Gocke et al (College of Physicians and Surgeons, Columbia Univ, New York 10032)

Lancet 2:1149-1153 (Dec 5) 1970

Four of eleven patients with biopsy-proved polyarteritis nodosa were also found to have Australia (Au) antigenemia. The four Au-antigen-positive patients exhibited a typical polyarteritis syndrome but differed from the seven antigen-negative patients in that they also had evidence of mild hepatic damage. The presence of circulating immune complexes in the sera of three of the four Au-antigen-positive patients was demonstrated by serological, ultracentrifugal, and electron microscopic studies. These complexes were further shown to be composed of Au antigen and immunoglobulin. Immunofluorescent studies of tissue from one of the patients revealed deposition of Au antigen, IgM, and β_2C in blood vessel walls.

Familial Hypoplasia of Both Internal Carotid Arteries

J. H. Austin and J. C. Stears (Univ of Colorado Medical Center, Denver 80220)

Arch Neurol 24:1-10 (Jan) 1971

Familial hypoplasia of one or both internal carotid arteries should be considered whenever cerebral ischemia or hemorrhage occurs at an unusually early age. Two and possibly three brothers in a sibship of 11 had bilateral hypoplasia of the internal carotid artery. Their first symptoms occurred at 18, 30, and 33 years and were consistent with ischemia of the affected cerebral hemisphere. Palpation of the arteries in the neck gave no indication of the diagnosis. Angiograms showed narrowing of both proximal internal carotids plus an abundant network of collateral circulation. A recessive inheritance is suggested by the finding that the parents were unaffected. Chromosome analysis of white blood cells was normal.

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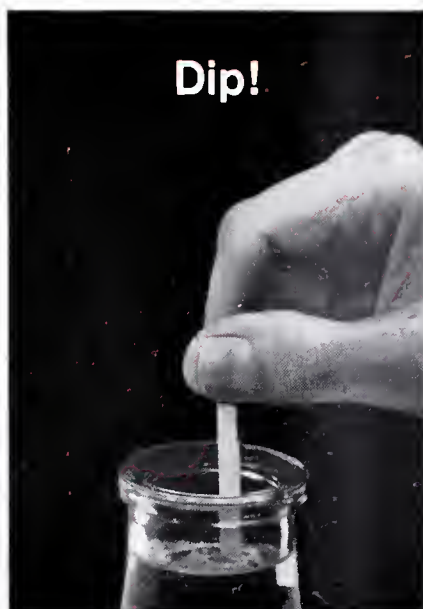
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Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.^{1,2,3}

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,¹ Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

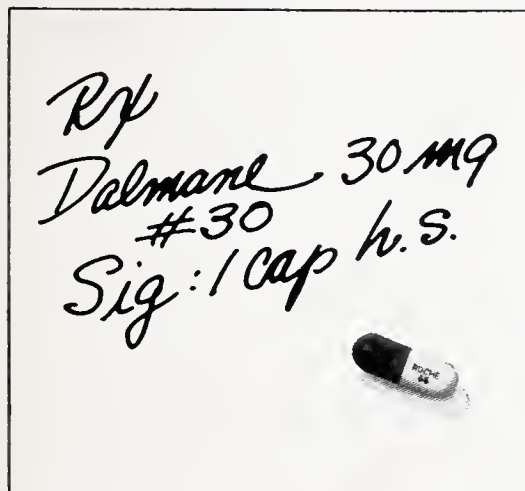
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.³ Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., et al.: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. 2. Kales, A., et al.: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. 3. Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

New **Dalmane**[®]
(flurazepam hydrochloride)

Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdose, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.



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Management of Acute Myocardial Infarction*

Jack L. Davis, M.D.**

During the past 10 years a large amount of information has been gained about the patient with coronary artery disease, especially acute myocardial infarction. Throughout this period of time concepts and modes of therapy have changed. In the early 1960's the concept of coronary care became widely established throughout the United States and subsequently in 1966 the first coronary care unit was established in Arkansas. Since that time the growth of the number of coronary care units and the interest and the treatment of the patient with acute myocardial infarction throughout the State of Arkansas can be demonstrated by the following slides.

This map of the State of Arkansas shows the communities from which 146 physicians and 190 registered nurses have been trained in the Arkansas Regional Medical Program-sponsored Coronary Care Courses. In addition, prior to the onset of formal courses, many other physicians and nurses were trained either in local courses established within their community or in courses outside of the State of Arkansas.

In discussing the management of acute myocardial infarction it is pertinent to digress, initially to review material concerning the patient population being dealt with and then to take a look at acute myocardial infarction per se and the patient with coronary artery disease. Then, assessment of the current knowledge can be made and put into perspective as far as the bedside management of the patient is concerned in the community hospital, both at the present and in the future.

Statistically, cardiovascular diseases are the leading cause of death in the United States.

A breakdown of the various types of cardiovascular disease demonstrates that approximately 530,000 deaths per year in the United States are due to coronary artery disease. In order to realistically consider how management of myocardial infarction influences overall mortality, it is essential to first assess the volume of patients that are actually cared for inside the hospital, to whom at the present concepts of coronary care are directed. In addition, it is pertinent to consider the rather large segment of patients who die of complications of coronary artery disease, especially sudden death, prior to reaching the hospital or after hospitalization.

In large population studies approximately 50-60% of all deaths from coronary artery disease occur prior to the patient arriving at the hospital. The largest portion of that particular mortality is in the early hours at the onset of acute myocardial infarction. It is, of course, very difficult to determine with a high degree of accuracy whether a patient who sustains sudden death or death prior to arriving at the hospital has sustained an acute myocardial infarction, as even with autopsy information available microscopic changes diagnostic of acute myocardial infarction may not be seen until 2 hours after the infarct has occurred. In addition, less than one-quarter of all patients experiencing sudden death with coronary artery disease have a thrombus in the coronary arteries. So when one speaks of death from acute myocardial infarction in many instances it's necessary to include death with patients known to have coronary artery disease. In opposition to the large population studies which reveal that approximately 50-60%

*Presented at the Annual Session of the Arkansas Medical Society, Hot Springs, April 26, 1971.

**Assistant Professor of Medicine, University of Arkansas School of Medicine.

of all deaths occur outside of the hospital the same situation is probably not true for the community hospitals. The primary reason for the high mortality rate prior to hospitalization in the series studied so far is because of delays, both in patient decision time and reaching a physician by telephone or transportation to the hospital, or delay in an emergency area. The largest portion of the delay is that time involved in the patient making a decision to seek medical care because of his symptoms. In general one would expect that in the smaller community with more readily available hospital facilities that the delay time would be shorter as far as transportation is concerned. There are very few statistical studies which have demonstrated this; however, in certain areas of the county, data collection is being undertaken in which the mortality and morbidity in coronary artery disease, both in and out of coronary care units, is being tabulated for the community hospitals as well as for all hospitals throughout the State. In one such study in the State of Minnesota, which keeps records from 98 of the 105 coronary care units throughout the State, the mean arrival time is much shorter. If it indeed is true that the patient will arrive at the community hospital at a much earlier time than in a large metropolitan area it is even more pertinent to discuss the concepts of coronary care.

In taking an individual patient or a group of patients through an acute myocardial infarction, one finds that a certain percentage of patients will die within 15-20 seconds. A large segment of patients will die within the first hour to hour and a half. Between 40-50% of non instant deaths were considered to be patients in whom resuscitation could have been successful had the patient arrived at the hospital in time. All evidence to date indicates that the patients who succumb within the first 15-20 seconds do so probably from ventricular tachy-arrhythmias, ventricular fibrillation or acute heart block associated with the initial infarction or without demonstrable infarction at post-mortem examination. Of the second group of patients dying within 1-2 hours after an acute myocardial infarction there is a large body of evidence that has been gained from the studies of Pantridge in Belfast, Ireland, but also now by Grace in New York City and by other groups

at Portland, Seattle and Montgomery County, Maryland. This body of evidence indicates that both the slow rhythm disturbances, bradyarrhythmias, including heart block, as well as the fast rhythm disturbances, tachyarrhythmias are most common in the first few hours of the onset of acute myocardial infarction. The incidence of heart block closely approximates the raw mortality rate in the first few hours. In studies where mobile coronary care ambulances have been utilized to transport such patients, several groups have found that the overall mortality rate can be reduced by early treatment of brady-arrhythmias and that early treatment lowers the incidence of the subsequent development of shock in these patients. Although mobile coronary care is probably not applicable in most areas of Arkansas, it may be possible to reduce decision time to a minimum in the individual community thus allowing for an earlier arrival to a hospital and a resultant reduction in overall mortality. During the coming year, the American Heart Association will be publicizing symptoms of heart attacks in order to reduce decision time. It might be anticipated that an increased number of patients will be seeking medical opinion for symptoms compatible with early infarction. Only time will tell what percentage of these patients will actually develop potentially fatal dysrhythmias or myocardial infarction. Currently about twenty-five percent of patients observed for infarction in coronary care units prove not to have sustained acute damage, although most do have coronary artery disease.

The primary principles of coronary care are the placing of the patient with acute myocardial infarction, as early as possible in the course of the infarction, under observation for the onset of either tachy or brady arrhythmias and treating these dysrhythmias in order to prevent potentially fatal ventricular fibrillation or heart block. A brief glance at the nature of the rhythm disturbances is in order before discussing how current knowledge applies to the specific rhythm disturbances. The vast majority of patients who develop ventricular fibrillation with acute myocardial infarction do so only after having had certain types and numbers of premature ventricular contractions. The types of premature ventricular contractions are: runs or salvos of PVCs, PVCs greater than 4-5 per minute, PVCs with R on T phenomena, multifocal PVCs and PVCs in

bigeminy. The usual results of the untreated occurrence of these types of premature ventricular contractions in acute myocardial infarction is ventricular fibrillation. Standard treatment is the use of Xylocaine (Lidocaine) in doses of 50-100 mgm I.V. with a 2-4 mgm per min. drip which produces a rapid reduction in the number and frequency of premature ventricular contractions in most patients resulting in prevention of fatal ventricular tachy-arrhythmias. There have been very few complications associated with the use of Lidocaine if total doses are kept below 250-300 mgm. per one half hour. Allergic reactions are very rare. Each patient, however, has a certain dose level at which CNS depression or irritability occurs requiring attention to avert respiratory depression. Since Lidocaine has become available in dose vials and without the preservative, the incidence of convulsions is indeed very rare. Indeed, there has been no single episode of anaphylaxis or seizures in over 200 patients treated at the University of Arkansas Coronary Care Unit. Lidocaine does not significantly depress myocardial contractility as do Pronestyl (procainamide), Inderal (propranolol), and Quinidine. The mechanism of action of Lidocaine is quite different from procainamide or propranolol in that conduction through the AV node is not depressed, but enhanced. Indeed, one of the potential problems that may arise in treating the patient with acute myocardial infarction occurs when atrial fibrillation ensues. The ventricular response to atrial fibrillation may markedly increase during Lidocaine administration. Despite speeding conduction through the A-V node, Lidocaine will suppress a primary or idioventricular focus which may be the only pacemaker and therefore is relatively contraindicated when PVCs occur with sinus bradycardia or heart block until atropine or pacing has been utilized to establish a more rapid ventricular response which, alone, will usually reduce the ventricular irritability.

In addition, some new concepts have been formulated in this area and some old concepts have been re-applied. In certain patients with acute myocardial infarction, PVCs may be resistant to Lidocaine therapy. In some of these patients, the serum potassium may be low, which could be predicted on the basis of knowledge that the patient was a hypertensive on diuretic therapy without potassium replacement prior to

sustaining an acute myocardial infarction; however, there are a few patients with acute myocardial infarction who have no history compatible with hypokalemia and whose serum potassiums are 4/meq/L-5 meq/L, who do not respond to Lidocaine or other antiarrhythmia agents but do respond to potassium infusion with doses in the range of 40-120/meq per 500 ccs of D5W. In addition, there are a few patients who will not respond to Lidocaine initially because of the nature of the action of the drug. In these patients, Procainamide, parenterally, may lead to prompt and rapid response because the drug has a different basic mechanism of action — suppressing conduction within the bundle system and in the atrial ventricular node as opposed to Lidocaine.

What about the brady-arrhythmias? Sinus bradycardia, without associated findings, such as evidence of congestive failure or ventricular arrhythmia, usually poses no difficulty in the patient with acute myocardial infarction and commonly occurs when they are asleep. However, persistent sinus bradycardia may allow the escape of ventricular tachy-arrhythmias and treatment is directed towards speeding the sinus mechanism which usually suppresses the ectopic foci in the ventricle. This can usually be accomplished with small doses of atropine but occasionally will necessitate as much as 1-2 mgm. of atropine intravenously before the sinus bradycardia and premature ventricular contractions can be obliterated. Frequently marked bradycardia follows morphine administration due to the vagal properties of the drug. Forms of heart block, including first degree, second degree AV block with the two types: Wenckebach (Mobitz I) and second degree A-V block (Mobitz II variety) and third degree A-V block are most common with inferior myocardial infarction due to an occlusion of the right coronary artery which in the vast majority of cases supplies the artery to the A-V node from a point distal to the occlusive process. Treatment for the various forms of heart block and acute myocardial infarction is directed primarily at two points — one is achieving an adequate rate in order to prevent escape ventricular tachy-arrhythmia, and two, maintaining an adequate rate necessary to supply cardiac output in hope of preventing the onset of shock or congestive failure. There has been a great debate about the place of pacing and acute myo-

cardial infarction. In some series the overall mortality rate does not seem to be reduced by the use of temporary transvenous pacings. However, in other large series, which include community hospitals, in which patients may be suspected to have an earlier arrival time, the mortality rate without pacing has been in the range of 50%, and with pacing in the range of 25%. At the present time, the most ideal method for managing the patient with heart block and acute myocardial infarction is by the use of temporary transvenous pacing; however, it is recognized that the vast majority of patients, particularly those with posterior myocardial infarction, will have mechanism that emanates from the atrio-ventricular junction with a narrow QRS complex and a rate around 60/min and do quite well with only medical therapy. Atropine may revert the block to normal sinus rhythm or very small doses of Isuprel (isoproterenol) can be utilized to speed the rate of the indioventricular rhythm. In some measure the use of pacing is dependent upon facilities and the training of individual physicians in the various communities. Certainly it is true, that in the area of reduction of dysrhythmias, pacing is not a major reason for reduction of mortality rates in the Coronary Care Unit.

With early and aggressive management of rhythm disturbances in acute myocardial infarction it is possible to achieve a reduction of hospital mortality of 30-50%. The remaining deaths are largely due to varying degrees of failure of the left ventricle as a pump manifested by congestive heart failure or shock or both. A small number of patients succumb to emboli or rupture of the ventricle. In those patients who die from pump failure, at autopsy, 40-50% of the left ventricle is found to be involved in a necrotic process. In many of these patients autopsy evidence reveals multiple zones of infarction of different age indicating that extension of infarction has occurred throughout hospitalization. Major efforts are now being directed to prevention of infarct extension by the National Heart and Lung Institute. Certainly there are many of these patients in whom artery disease would prohibit even the most aggressive attempts at surgical revascularization which at present, at least during the acute infarction, is an experimental procedure. When mortality statistics are carefully examined it is apparent that both the age of the patient and the

presence or absence of varying degrees of heart failure and shock dictate the eventual prognosis. In general the older the patient and the worse the degree of hypotension and/or congestive failure the gloomier the prognosis becomes. In those patients with profound congestive failure and shock upon admission to the hospital the mortality rate remains 75-80% regardless of the form of therapy applied. There is, however, an intermediate group of patients in whom by applying current understanding of the pathophysiology of the acute infarction that individually the prognosis may be improved. Indeed, about 15% of patients who develop "pump failure" do so after admission to the CCU. By applying current knowledge it may also be possible to prevent the extension of infarction.

Pantridge has shown that the incidence of development of congestive heart failure and shock in myocardial infarction can be reduced by early treatment of rhythm disturbances. Certainly it seems reasonable that the function of the damaged left ventricle, if confronted with ventricular tachy-arrhythmias, rapid supraventricular arrhythmias or extremely slow rates with heart block, will further deteriorate. In certain instances when pump failure seems to follow the onset of a tachy-arrhythmia prompt cardioversion may be necessary to prevent overt rapid deterioration of ventricular function manifested by overt pulmonary edema and shock. As cardiac output is reduced so will reduction in coronary blood flow follow setting up a cycle of events leading to extension of infarction.

¹¹ Certain other physiological derangements occur in the patient with infarction. Changes in pulmonary blood flow occur. Attention to these changes may influence mortality in the individual patient. A selective shift of flow to the upper lobes, which are not ventilated as adequately as the lower lobes, results in a decrease in arterial oxygen saturation. Oxygen administration will at least partially correct the hypoxia. Excessive doses of morphine, beyond that necessary to relieve pain and anxiety, further reduce arterial oxygen saturation to a point which may be critical to an already hypoxic myocardium. As congestive failure insues this preferential shunting increases further reducing arterial oxygen delivery to marginal ischemic areas of the myocardium. There then becomes a definite rational for oxygen therapy, aversion of excessive doses

of morphine and early treatment of left ventricular failure.

There is at least suggestive evidence that mortality may be reduced by early recognition and treatment of congestive failure. Congestive failure may be incipient in patients with infarction. The appearance of an S₃ gallop may precede the onset of dyspnea and orthopnea by several hours. Fine moist rales that do not clear with cough may also precede symptomatic pulmonary edema. Not infrequently interstitial pulmonary edema may be present in the absence of auscultatory evidence as audible rales are indicative of alveolar fluid accumulation. In these instances, however, a third heart sound gallop is frequently audible. Careful auscultation, even by nurses who can become quite tuned in on gallop rhythms, or comparison of an admission chest x-ray with a repeat portable film done with the same technique can be instrumental in detection of incipient congestive failure. Upon detection, low dose digitalization can be started, i.e. digoxin 0.5 mgm I.V. initially, 0.5 mgm in 2-4 hours, for total dose of 1.0 mgm then 0.25 mgm daily, usually orally. In addition, or initially, diuretic therapy may be instituted orally or parenterally, depending upon degree of congestive failure. With addition of diuretic therapy adequate supplemental potassium chloride must be added to avert production of dysrhythmias. In certain instances ventricular tachy-arrhythmias may begin with the onset of congestive failure and primary attention directed to treatment of left ventricular failure will result in a reduction of rhythm disturbances.

In the past few years certain patients with myocardial infarction, hypotension with blood pressures of less than 90 mm Hg. systolic, oliguria, and peripheral evidence of impaired circulation have been recognized to be hypovolemic. Usually these patients have had nausea, vomiting and reduced oral intake or received diuretics prior to, or in the early hours of admission. Usually these patients do not have evidence of pulmonary edema. If fluid volume deficit appears to be a complicating factor, vasopressor therapy usually only aggravates the situation. Improved recognition of these patients may be attained by the use of central venous pressure. With the hypotension-oliguria syndrome and low central venous pressure, i.e., less than 10 cm. water, in the absence of pul-

monary edema, volume administration, i.e., 200-500 cc of low molecular weight dextran in increments of 100 cc may be tried. If central venous pressure (CVP) rises and does not return to the pre-volume administration level, adequate volume is usually present and volume infusion should be ceased. However, if during incremental volume administration, CVP rises, but returns to previous levels, incremental fluid administration may be continued, carefully observing for signs of pulmonary edema, with resultant increase in blood pressure, urine output, and improvement in peripheral perfusion.

Recently, techniques have become available to monitor pressures within the pulmonary artery using the Swan-Ganz balloon tip catheter. Such monitoring provides a more sensitive index of left ventricular function than does central venous pressure. Special training of both physician and nursing personnel is necessary to utilize this method. If the patient can be titrated through the course of moderate pump failure, improvement of left ventricular function will slowly insue in the individual patient.

In a group of patients who survive the initial aggressive management of arrhythmias and pump failure within the CCU the decision of when to discontinue monitoring and observation occurs next. Statistical studies indicate that 10-30% of all patients who die of acute myocardial infarction, do so after leaving the confines of the coronary care unit. Predicting those patients that may become candidates for late death, i.e., after the fourth day, but prior to discharge from the hospital therefore becomes important. So called late deaths may be sudden and due to dysrhythmias. Those patients who have had a complicated course, i.e., major ventricular tachy-arrhythmias requiring drug or electrical conversion, heart block, or pump failure sustain late death. There is good evidence to suggest monitoring and close observation for even up to ten days or two weeks may be necessary rather than the usual three to four days of close observation necessary for the uncomplicated patient. Continued close observation is necessary both acutely and even into the early ambulation period for complications of myocardial infarction such as ventricular aneurysm which may be responsible for persistent congestive failure, arrhythmias or embolic phenomena. Post myocardial infarction syndrome

(Dressler's Syndrome) composed of pulmonary infiltrates, effusion, pericarditis and fever may mimic recurrent infarction or be a causative factor in recurrent atrial arrhythmias. Certainly, pulmonary embolism or peripheral arterial embolism represent complications. The de-

cision of anticoagulation, primarily to prevent pulmonary embolism and peripheral arterial embolism, is best individualized weighing the known benefits, largely only applicable until ambulation is attained, with the contraindications in a given patient.



Vascular Complications in Nephrotic Syndrome: Relationship to Steroid Therapy and Accelerated Thromboplastin Generation

A. P. Mukherjee et al (Univ of Malaya, Kuala Lumpur, Malaysia)

Brit Med J 4:273-275 (Oct 31) 1970

Three patients, two with nephrotic syndrome, and one with nephrotic syndrome but who had normal cholesterol level, developed occlusive vascular disease. The two men developed arterial thrombosis and the female patient had renal vein thrombosis. Observations were recorded on acceleration of thromboplastin generation in these and other patients under steroid therapy. The phenomenon of accelerated thromboplastin generation appeared to be related to steroid therapy. In vitro addition of hydrocortisone succinate to normal adsorbed plasma had no effect on the rate of thromboplastin generation. Heparin had the effect of retarding the rate of thromboplastin generation in normal plasma as well as in plasma with accelerated thromboplastin generation. Cortisone is known to cause degranulation and suppression of mast cells, the body's main source of heparin. Steroids probably cause acceleration of thromboplastin generation by reduction of circulating heparin via this pathway. Accelerated thromboplastin generation probably plays an important role in the pathogenesis of occlusive vascular disorders in these patients with nephrotic syndrome.

Coronary Heart Disease Among Workers Exposed to Carbon Disulfide

S. Hernberg et al (Institute of Occupational Health, Haartmanink, Helsinki)

Brit J Ind Med 27:313-325 (Oct) 1970

Coronary morbidity and some coronary risk factors were studied among 410 workers with at least five years' exposure to CS₂ in a viscose rayon

plant. The exposed men were individually matched with controls from a paper mill. Age, birth district, and similarity of work and social status were considered in the matching. Smoking habits, leisure time, physical activity, physical fitness, obesity, and drug therapy were checked at the examination. The exposed group had a higher systolic and diastolic blood pressure ($P < 0.001$) and a slightly higher frequency of angina ($P < 0.03$). Commonly used limits for statistical significance were not achieved for any isolated ECG finding classified according to the Minnesota code but there was a slightly higher prevalence of coronary findings in the exposed group. An excess of coronary deaths was found for 48 men who had been exposed for at least five years and who died under 65 years of age (expected 15.2, observed 25, $P < 0.002$). The excess of coronary deaths in combination with the hint of a higher prevalence of pathological ECGs among the exposed subjects suggest that exposure to CS₂ may promote coronary heart disease.

Prognosis for Children With Multiple Handicaps

R. E. Merrill (Univ of Virginia School of Medicine, Charlottesville 22904)

Amer J Dis Child 121:207-212 (March) 1971

From a population of 278 patients with multiple handicaps of many varieties, the outcome in 32 cases is summarized. These 32 cases were selected by death or because the patient had reached young adulthood. Six (19%) may be considered successful and another six (19%) may have a remote potential for success. The remaining 20 patients (62%) are either dead (9) or absolute failures (11). The reasons for success and failure are discussed and several suggestions for rectification are made.

Anesthesia for Ambulatory Surgery*

Charles S. Coakley, M.D.**

Marie-Louise Levy, M.D.***

Anesthesia for ambulatory surgery or "In and Out Surgery" as it is called at the George Washington University Hospital is a service that has been developed for patients who have minor surgical procedures using either local or general anesthesia and go home the same day. With the concern for the spiraling costs of medical care and the expanding population requiring more hospital beds, plans must be made both to reduce costs and to more efficiently utilize hospital beds.

A major contribution to the development of this service resulted from experience obtained from the oral surgeons at the Mead Dental Hospital in Washington, D. C. Our experience dates back to the 1930's when the George Washington University Hospital Anesthesiology Staff performed anesthesia for ambulatory patients in this dental hospital. From a team approach it was proven that these procedures could be done safely and more economically for ambulatory patients.

A major contribution to this service has been made by Dr. John Dillon at the University of California, Los Angeles. He instituted a program in late 1962 and in 1966 reported the results of two years (1963-64) of study¹ and in 1969 published the "Anesthetic Management of the Outpatient" in *Anesthesia Rounds*.² The new facilities at George Washington were opened in March 1966 and the first year's survey was published in 1968³. Since these publications, interest has developed in this type of service and other hospitals have or are planning ambulatory surgery facilities.^{4,5}

In addition, free-standing facilities are being developed. The Surgicenter in Phoenix, Arizona, opened on February 12, 1970, and has been very successful.

*Presented at the Annual Meeting of the Arkansas Medical Society, Hot Springs, April 27, 1971.

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***Associate Professor, Department of Anesthesiology, George Washington University Medical Center, Washington, D.C.

Facilities

Ideally, these facilities should be in a separate area of the hospital but geographically close to the operating room, recovery room and anesthesia offices, so that all anesthetizing areas are in close proximity for better supervision. We were fortunate to be able to accomplish this when a new wing was being planned for our hospital. If a building program is not planned, it is possible to utilize part of the existing operating rooms but a separate recovery room, waiting and dressing area must be made available. The In and Out Surgery consists of a waiting room, reception desk, male and female dressing rooms with bathroom facilities, two operating rooms and one cast room with scrub and sterilization areas. A recovery area is adjacent to the main recovery room with space for seven stretchers and a sitting area to allow patients time to recover. A floor plan of the In and Out facilities is shown in Figure 1.

Preoperative Evaluation and Preparation

Surgical patients for the In and Out Surgery are selected by the surgeon. Patients in reasonably good general health for procedures that re-

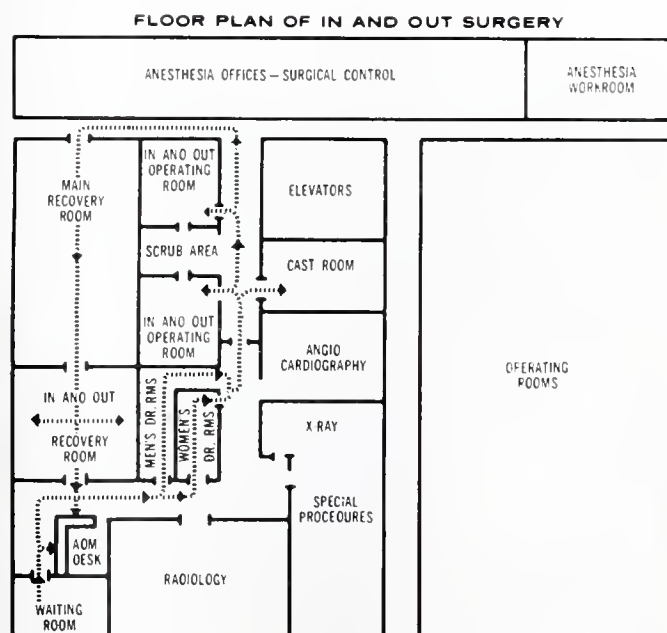


Figure 1

quire only short post-operative observation can be safely operated upon in this unit. Only procedures where minimal post-operative bleeding occurs are performed. We do not do T & A's because of this hazard. However, a study of 40,000 of these done on an outpatient basis reported no mortality and only 0.006% of these patients were admitted to hospital for hemorrhage.⁶ It is the final decision of the anesthesiologist as to whether or not an anesthetic can be administered.

The patient's history, physical and laboratory work are done within 72 hours prior to surgery. An abbreviated examination with a simplified check-off type form is used. Laboratory work consists of CBC, Hct or Hb and urinalysis. All patients are interviewed and their history, physical and lab work reviewed prior to surgery. If either the patient or surgeon has any concern about the procedure, we encourage surgeons to have the patient come in for an early interview. Otherwise most patients are seen just prior to their surgery. Rarely are procedures cancelled and the most common causes are ingestion of food or liquids and an acute upper respiratory infection.

Patients are requested to report 45 minutes before scheduled surgery and necessary forms are filled out, financial arrangements made and consent forms signed. About 15 minutes prior to surgery an aide takes the patient to a dressing room where a gown, robe and slippers are provided. Clothes are stored in individual lockers. When the operating room is ready, the patient is walked into the assigned room and placed on the operating room table. Premedication is not used routinely. Much of the apprehension and tension can be relieved by reassurance and instilling confidence in the patient.

Surgical Procedures

In 1970 approximately 3,020 operations were performed. All surgical specialties use the facility. (Figure 2) Abortions have doubled in the past year due to a legal challenge of the abortion laws and as the result the number has increased five-fold in the In and Out Surgery. This is now declining as the result of a clinic that uses a high vacuum technique without anesthesia and at a lower cost. The majority are being done in In and Out Surgery because it is more economical than being admitted and with a shortage of hos-

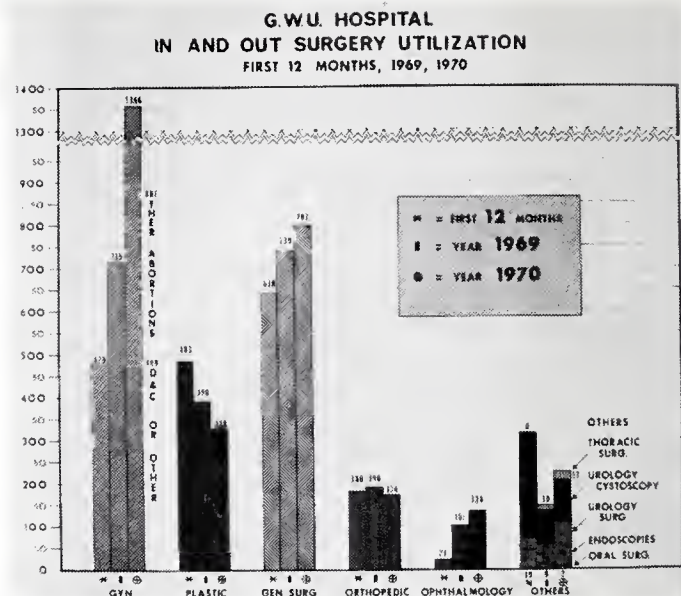


Figure 2

pital beds they could not have otherwise been done in our hospital. Diagnostic and therapeutic nerve blocks are also done in this facility. (Figure 3)

IN AND OUT ANESTHETICS

THERAPEUTIC OR DIAGNOSTIC NERVE BLOCKS

	1969	1970
Sphenopalatine	3	—
Phrenic	1	2
Intercostal	3	19
Paravertebral	—	3
Sciatic	3	—
Stellate ganglion	—	4
Lumbar sympathetic	1	6
Epidural	3	4
Caudal	8	18
Subarachnoid alcohol	1	—
	23	56

Figure 3

Many pediatric procedures which include hernia repairs can be done as In and Out procedures. However, most of the pediatric anesthesia is referred to Children's Hospital and as the result, our pediatric volume is not large. As stated previously, we do not do T & A's because of the problem of hemorrhage and with the few of these scheduled there is no reason to do them as outpatients. Emergency surgery is discouraged in this unit.

In and Out Surgery is open five days a week from 8:00 a.m. to 4:00 p.m. and the recovery room is staffed until 11:00 p.m. When possible, patients for general anesthesia are scheduled in the morning so as to allow for sufficient recovery room time.

Anesthetic Techniques

During 1969 and 1970 there were 5,300 patients managed in the In and Out Surgical Unit. Of these, 2,615 local anesthetics were administered by the surgeon as his and the patient's choice. This is approximately half of all procedures. There were 2,285 operations under general anesthesia (43.1%) with the remainder requiring no anesthesia or regional nerve blocks. (Figure 4)

General anesthesia usually is induced with thiopental until the eyelid reflex disappears and then followed with nitrous oxide and a narcotic if additional analgesia is needed. We avoid explosive anesthetics, spinal anesthesia, and use narcotics for analgesia whenever possible in place of halothane in order to avoid the rare complication of hepatic hypersensitivity reaction. Ketamine has not been found to be useful for In and Out Surgery. The use of narcotics has resulted in increasing recovery time an additional hour. Relaxants were used 157 times and 71 patients were intubated.

All patients receiving general anesthesia are discharged by a staff anesthesiologist. (Figures 5,6) Vital signs should be normal with no vertigo, nausea or vomiting or other complications present and patients must be discharged with a responsible adult. The patient is again instructed not to drink alcoholic beverages or drive a car for 24 hours. These instructions are signed and witnessed before surgery.

G.W.U. HOSPITAL
IN AND OUT SURGERY STATISTICS
FIRST 12 MONTHS, 1969, 1970

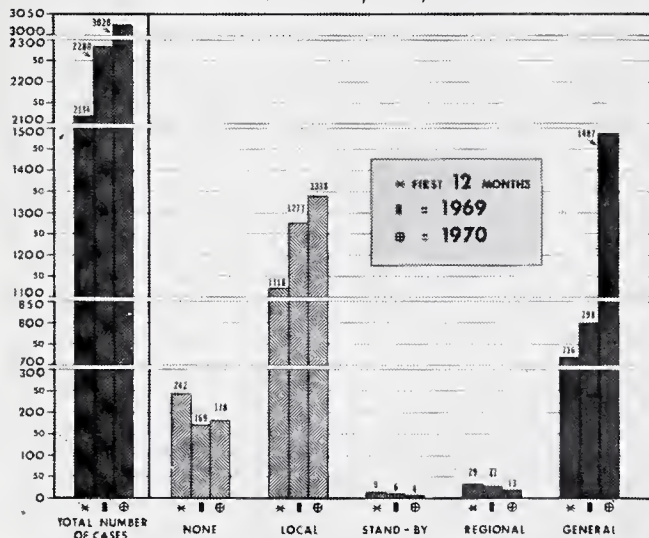


Figure 4

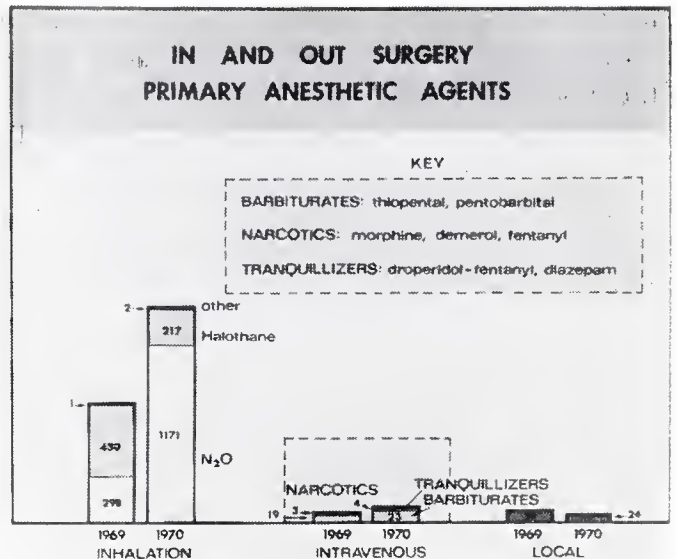


Figure 5

Complications

During the first year, patients receiving general anesthesia were given questionnaires to be returned to the Department of Anesthesiology. These covered preoperative evaluation and preparation; postoperative course which included length of stay in recovery room, duration of drowsiness and pain; postoperative complications for the first 24 hours; and their reaction to In and Out Surgery. Of the 758 patients given questionnaires, 610 (80.4%) returned them. The results were as follows. The preoperative instructions that were given to them were considered adequate by 89% of the patients. No additional time was taken by the patient for preoperative examination in 31%, less than one-half day for 60%, and more than a half day for 9% of these patients.

The average stay in the recovery room was less than two hours for 21% of the patients; 63%

IN AND OUT SURGERY
OTHER ANESTHETIC AGENTS

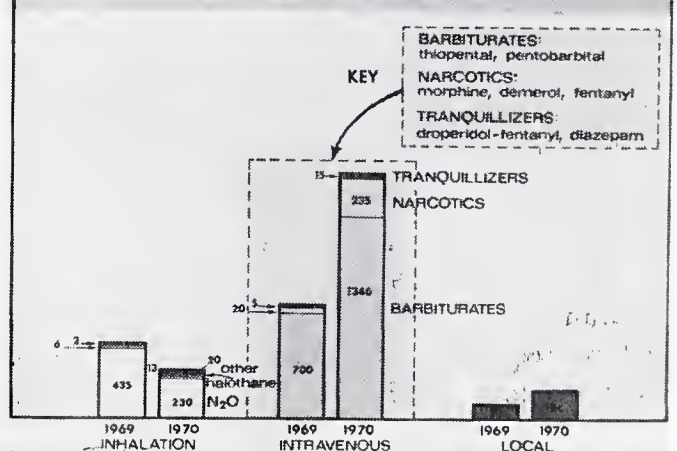


Figure 6

for two to four hours; and 14% over four hours. Two percent of these patients were admitted to the hospital usually for surgical reasons but occasionally for prolonged recovery time. Patients admitted to the hospital during 1970 totaled 30 (1%). These consisted of anesthetic, surgical and patient problems and are listed in Figure 7.

IN AND OUT ADMISSIONS 1970	
<i>Anesthetic Problems</i>	
Vomiting & Aspiration	1
Prolonged Recovery	6
<i>Surgical Problems</i>	
Error in Diagnosis (ca)	1
Advanced Pregnancy (16 wks)	1
Ectopic Pregnancy	3
Perforated Uterus	4
Post-op Bleeding	2
Further Observation	9
<i>Patient Problems</i>	
Post-op Headache (migraine)	1
Refused to go home	2
<hr/>	
Total	30

Figure 7

The usual complications such as nausea and vomiting, headache, sore throat, soreness at needle site and muscle pains were seen at the same frequency as those occurring in in-hospital patients.

The overall response of patients and surgeons has been excellent. Patients' reactions have indicated that 96% liked the idea, felt that it was convenient and efficient, disturbed their routine less than being hospitalized and recovery was more rapid. Over the years, I have been impressed with the more rapid recovery of the In and Out patient receiving general anesthesia. This is probably the result of an obvious effort to use reduced amounts of anesthetic drugs and patients are encouraged by recovery room personnel to react and sit up as soon as they can; then they are given coffee, tea or cokes. Then too, their mental attitude is different in that they know with this type of procedure they are expected to recover rapidly and they usually cooperate.

Economics

The In and Out Surgery is a saving to patients, insurance companies and hospitals. Surgical procedures requiring general anesthesia cost the patient less than one-half in the In and Out Sur-

gery as compared to those admitted to the hospital. Comparative charges for patients having D & C are shown in Figure 8. The saving in hospital beds in these days when they are at a premium makes available additional beds that can be used for patients that must be hospitalized.

COMPARATIVE CHARGES FOR D AND C		
	<i>In Patient</i>	<i>In & Out Patient</i>
Operating Room	\$100.00	\$ 40.00
Recovery Room	30.00	50.00
Anesthesia Materials	10.00	10.00
Anesthesia	45.00	42.50
ECG Monitor	10.00	-----
Surgical Pathology	16.00	16.00
Laboratory (CBC, Urine)	*13.50	7.50
2 Days R B (Semiprivate)	152.00	-----
<hr/>		<hr/>
Total	\$376.50	\$166.00

*Includes serology

Figure 8

Summary

General anesthesia for ambulatory surgery has been found to be an entirely safe practice provided this is a team effort. The surgeon is concerned with his patients obtaining the best care and shares the anesthesiologists concern for the safety of the patient.

With this team concept and rigidly following the "rules", anesthesia can be administered as safely and with no more complications than in hospitalized patients. There is less interruption to the patients' daily routine, reduced hospital costs and more effectual use of hospital beds.

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Then, Now and Tomorrow*

James L. Dennis, M.D.**

After more than thirty years, including experiences as a country doctor, a city specialist, a full-time professor, a medical school dean, and now a university vice president, it is refreshing to meet with persons whom I can once again regard as my preceptors. The University of Arkansas School of Medicine and the people of Arkansas owe to you, the members of the Fifty Year Club, far more than can ever be recognized. You have lived your professional life during an era in which astounding scientific and technological advances provided you the tools that have made it possible for you to cure pneumonia, diphtheria, poliomyelitis, meningitis, tuberculosis, and many other diseases that in our early years of practice surrounded us all with a constant threat of death. I am sure that no one appreciates the advancements that have made medicine so effective more than you do. I am also sure that from a purely human standpoint you must feel dismay at many of the changes in medical practice which cloud the future of the medical profession.

This morning I would like to reminisce a bit as well as to speculate on the future. In looking back, several things stand out in my memory. First of all, I remember the warm, compassionate, and dignified physician who took care of me as a child. There is no doubt in my mind that such men provide the real motivating influence for most of us to become doctors. Next, I remember medical school days. At that time, many of the basic science teachers were terrifying as they pridefully assessed their success on the basis of the number of students who were unable to pass their course. This appears to have been very bad pedagogy but those of us who survived the courses felt relief, pride and a sense of accomplishment. In contrast, most of the clinical professors were a great joy. Their sense of mission and their compassionate concern for patients came through loud and clear — besides, they rarely flunked any of us. My first professor of medicine ingrained

in me the credo expressed so well by Oliver Wendell Holmes, "To cure sometimes" — "To relieve often" and "To comfort always." In my opinion, these words express the mission of a true physician and they are as fundamental today as ever in the past. If this philosophy could become "a way of life" — a prevailing attitude — during medical school and afterwards, we would probably do more to change the image of medicine than most of the technological advances we so doggedly pursue.

If the foregoing happens to make the professors of yesteryears sound like they were saints, it would be misleading. They were very human. Some of them gambled, some drank too much, a few of them had a mistress, and some of them may not have been the most knowledgeable—but in their common compassionate concern for the sick, they truly were saintly.

Actually, I do not remember a great deal that they said, but among the things they said that I do remember, were some of the stories they told. I recall my first lecture in obstetrics. The professor, who was a portly, dignified man walked into the lecture room and after a curt "Good Morning" said, "Gentlemen, in the beginning there was Adam and there was Eve. They raised Cain and it was so good that they did it again when they got Able." Then, he walked out. A few years later, I recall a very large Aunt Jemima-like female came into the Gyn clinic. She had a large pelvic mass. This information was quickly passed among the students and they all lined up for their first examination of a tumor by pelvic examination. The patient remained very passive until about the tenth examination when she opened her eyes and in a non-complaining voice said, "Boys, if you all does that to me just one more time, yore shore goin' to ring mah bell." I do not recall hearing a bell, but her comment broke up the clinic and, without being told, every student learned that behind every pelvic examination is a woman who has feelings.

Then, I recall as a senior student going out to

*Presented to the Fifty Year Club of the Arkansas Medical Society, April 27, 1971.

**Vice President for Health Sciences, University of Arkansas Medical Center.

deliver the baby of an unmarried young mother in a house of ill repute. The madam was very upset because she thought it would ruin her mattress. When the pains became hard, the girl began to scream and the little old lady just looked at her and said, "Honey, it serves you right. It's good goin' in, but it sure is hell comin' out." These kinds of human experiences represented our introduction to sociology as well as to medicine.

At the time you started practice fifty or more years ago 95 percent of all physicians were family doctors in general practice and there were very few communities without at least one doctor. The young M.D. actually sought the places where there was a shortage of physicians because that was where he was most likely to start a successful practice. He required little more than a black bag, a roll top desk and some mode of transportation — and he could do just about anything and do it as well as the doctor in the big city.

Recently I looked up some information on my grandfather who, during the 1800's was a lawyer, doctor and farmer at Evening Shade, Arkansas. I was amazed to find that in 1870 Evening Shade had a population of 500 persons, three of whom were listed as physicians. Nearby Ash Flat had 350 persons and five physicians. No wonder our older folks who live in small towns feel neglected today.

When you went into practice there were very few hospitals, and these were in the larger towns. People went to the hospital only when desperately and terminally ill. Most people just stayed at home, even to die. Doctors made house calls because that was where the action was. A woman who lived ten miles out in the country and had her baby at home might keep a physician occupied for a whole day or night.

No one talked about a "health care delivery system" but it was there and most people went to bed at night knowing where they could get in touch with a doctor if they needed one. This knowledge offered a real sense of security that no longer exists in many areas.

Traveling ten miles by horse and buggy might have taken most of the day. Now, modern highways and transportation actually make most people closer to good medical care than when there were many more doctors available in a very little hamlet. Perhaps we should begin to think

of the distance between a family and their doctor in terms of minutes away rather than miles away. If we did we might not have as big a health care problem as we seem to think.

When you and I started into practice there was essentially one level of medical care. Today medicine is stratified and fragmented into three levels of care — a circumstance that has evolved as a result of the explosion of technology and scientific specialization. We find super specialty care in our large urban medical centers, a broad spectrum of good specialty care in the large community medical centers, a broad spectrum of good specialty care in the community hospitals of our medium sized and larger cities and family medicine or primary care in the doctors' offices, neighborhoods, suburbs and in small communities. We do not have an overall shortage of most specialists, but in the area of primary care there is a huge vacuum.

Primary health care (Personally, I prefer the term family medicine) must be provided by someone who functions in the role of a family physician or generalist. Someone to whom a family can turn for advice, treatment, and guidance in health care matters and on whom they rely for access to entry into the health care system. The primary physician should serve as a personal physician responsible for continuing and comprehensive care. Today the role may be played by a family doctor, a general practitioner, an internist, or a pediatrician, but in the future these should be specifically trained for total family care. In the area of primary health care we find critical deficits in family physician manpower — and it is in this area that the health care delivery system is deficient. An estimated 25 to 40 million persons in this country now live in circumstances and areas where they do not have access to a physician of any kind. The responsibility of medical education is painfully apparent.

Our reasons for emphasizing the combination of the patient and his family as the target of health care deserves consideration. The family unit is the primary social group out of which all other social groupings are formed. The community is made up of family units, and the fundamental purpose of the community is to be found in its families. The genesis of most social problems and most health problems are rooted in the family environment. It is within the family milieu, and very early in life, that we find

the factors that generate antisocial behavior, mental health or illness, many chronic and degenerative disorders, communicable and nutritional disease, ignorance, poverty and many of the things that eventually culminate the illness and welfare dependency in later life. In a society whose stability is threatened, we must confront the pathogenesis of our problems. Associations of "sick" families can only produce "sick neighborhoods."

We might sum up our philosophy of medical education simply by stating, "The basic responsibility of a school of medicine is to educate — and the social responsibility of medical education is to produce well-qualified physicians of the kinds and numbers required to meet the health needs of our people." While we must produce the kind of physicians required to meet the needs of society, the university medical centers do have an obligation to continue the pursuit of knowledge. Research has benefited every one of you. This year's cure represents last year's research. To be practical, research is service deferred. However, in recent years the financing of research by the federal government accompanied by inadequate financing of medical education by both state and federal governments has led to serious imbalances.

It is unfortunate, but what medical schools will produce in the future may be in the hands of the way the federal government allocates its funds. If the state could afford to fully finance the medical center we might maintain some control over our destinies, but my recent experiences suggest that adequate state funding is not a likely

happening. At the national level we find the action is all directed at persistent efforts to impose a national health insurance. The health insurance principle is sound, but does it have to be a government monopoly? Furthermore, exclusive concern with financing payment for care evades the real issue — namely, the problem of getting enough doctors and facilities in the right places. The process of providing every American a federal "carte blanche" health credit card will only create a massive escalation in demands for more services at a time when we do not have the manpower to deliver the services. The end result will be a demand for a British-type National Health System. Perhaps, that is really what they are after. If this be true, you gentlemen may well have enjoyed the best fifty years that any physician in history has ever experienced. The professional life of freedom you have enjoyed is not likely to ever happen again.

Lest these remarks sound depressing, I must observe that the young people of today can and will accept things that we could not. Our profession will always be a highly respected one if we can maintain the ideals of service to mankind. Our young students certainly do have that ideal.

I will close with a quote from Abraham Lincoln, "Our inspiration — the past; Our responsibility — the present; Our hopes — the future."

I congratulate you on the fifty years of heritage you leave to inspire our next generation of physicians; I applaud your dedication to the responsibilities of the present, and I share with you your faith — which permits hopes for the future. May God be with you!



Incidence of Uremia and Requirements for Maintenance Hemodialysis

R. A. Branch et al (Royal Infirmary, Cardiff, Wales)

Brit Med J 1:249-253 (Jan 30) 1971

The biochemistry laboratory records of a 400-bed general hospital, serving a population of about 120,000, revealed that during a three-year period 477 patients had, at some stage during their admission, a blood urea of 100 mg/100 ml or more; 92% were over 50 years of age, 78% were over 60, and 51% were over 70. The raised blood urea was thought to be due to "pre-renal"

factors in 60% of the patients, to acute tubular necrosis in 8%, to obstructive uropathy in 12%, and to "intrinsic" renal disease in 20%. Renal failure precipitated by such factors as cardiac failure, chest infections, cerebrovascular accidents and shock was particularly common in old people. The hospital survey and replies to a questionnaire sent to all general practitioners in the area suggest that in the three-year period 14 patients may have been suitable for treatment by maintenance hemodialysis or renal transplantation. This represents a rate of approximately 39/1 million/yr under the age of 60 and 28/1 million/yr under 50.



ELECTROCARDIOGRAM

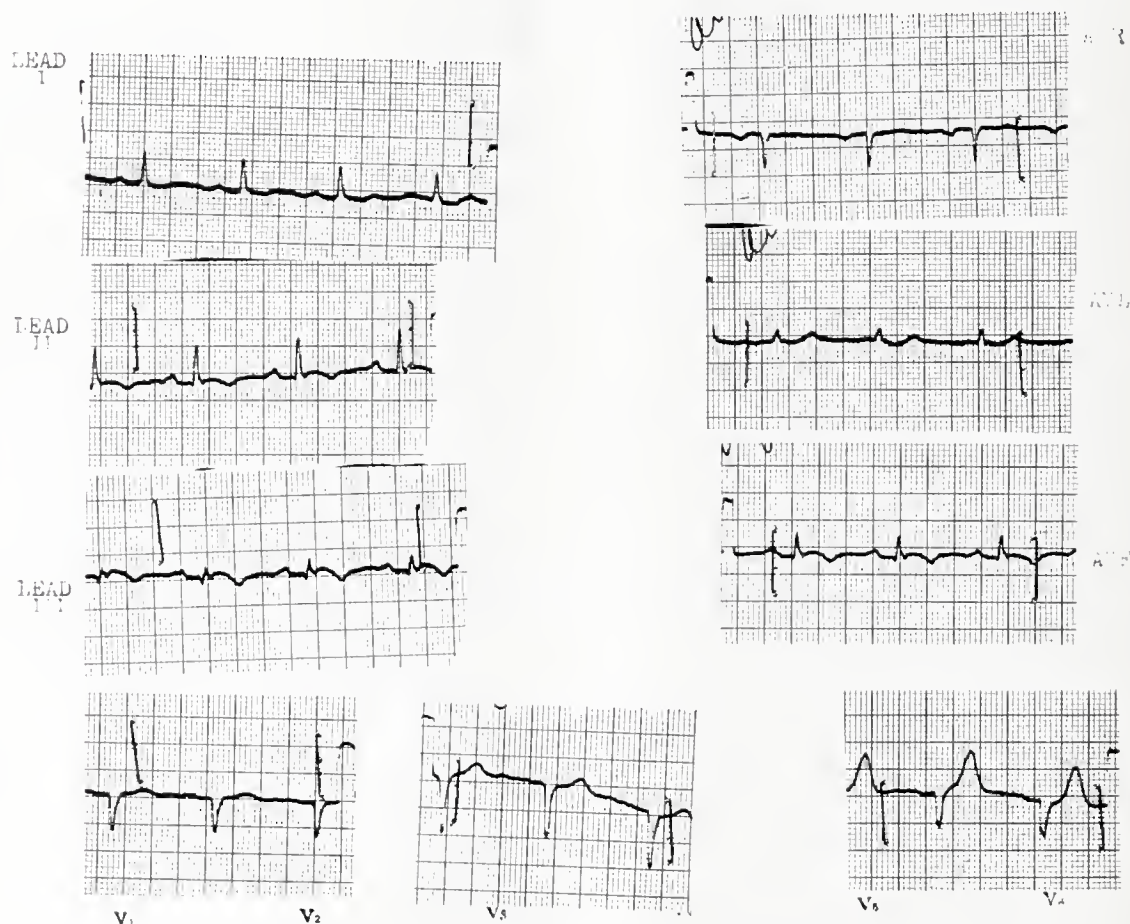
OF THE MONTH

AGE: 52 SEX: Male BUILD: Slender BLOOD PRESSURE: 120/80

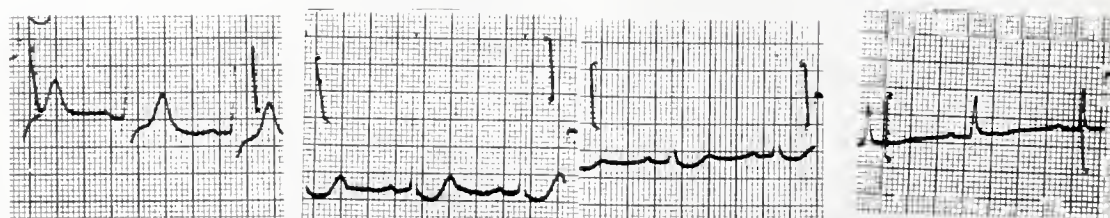
CARDIAC HISTORY & PHYSICAL EXAMINATION: Dull aching non-radiating upper chest pain lasting 2-3 hours. There was associated nausea, vomiting and diaphoresis. Physical examination was unremarkable except for an S_3 gallop.

OTHER DIAGNOSIS: Chronic alcoholism.

See Answer on Page 121



Interpretation:

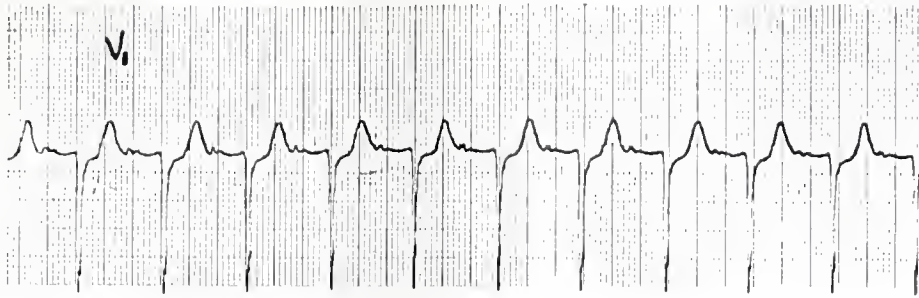


The Department of Cardiology, University of Arkansas Medical Center
A. J. Thompson, M.D., Fellow Cardiology

6/21/71

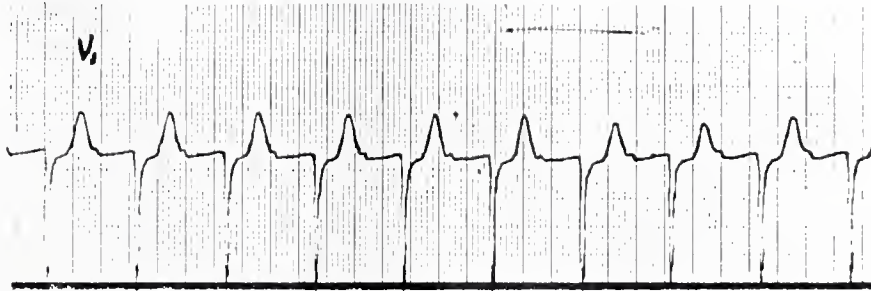
Rhythm Strips

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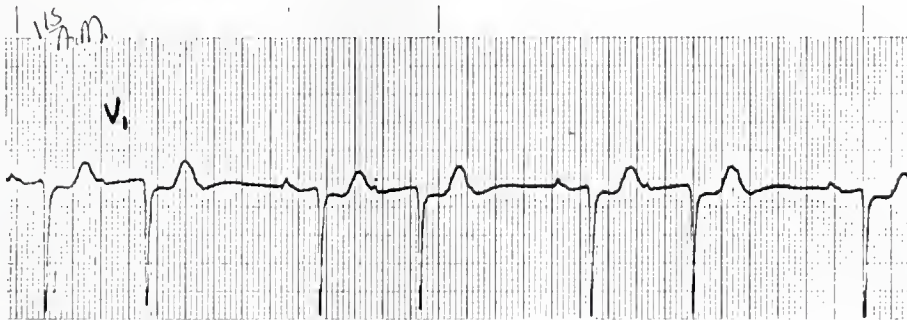
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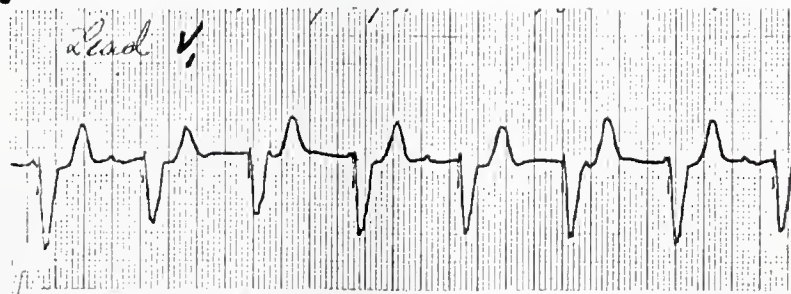
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PARKE-DAVIS PD-40

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PARKE-DAVIS PD-40

9:15 A.M.



PUBLIC HEALTH AT A GLANCE

Emergency Health Services in Arkansas

The solution to a comprehensive Community Health preparedness program is to mobilize all available resources, public and private, for a coordinated effort to successfully implement a program that would be commensurate with State and National planning to total disaster preparedness. But, can adequate disaster planning be accomplished if the hospital and the community is not capable of providing good emergency care, for the coronary, the accident victim or other everyday emergencies?

Adequate care involves an ambulance service with trained attendants, with equipment essential to stabilizing the patient to, and during movement, with radio communications to alert the hospital's emergency department and to provide guidance and direction to the ambulance attendants. It also involves an emergency department so organized, equipped and staffed that it can meet the daily needs of the community. This implies that an effective community Emergency Health Service program requires that the community must think beyond the consequence of mounting a single program and adopt the concept of total community involvement.

With this in mind, the Arkansas State Department of Health has combined the activities of the Division of Safety and Health Mobilization to form the Division of Emergency Health Services, which will coordinate responsibilities of everyday emergency health care and preparations for mass casualty care.

A comprehensive Emergency Medical Services plan is now under development which will indicate areas of proficiency and deficiency in relation to total Emergency Medical Services involvement.

Legislation has been prepared to present to the General Assembly to regulate the licensing, inspection and operation of ambulances; and, to provide standards for the licensing of ambulance drivers, attendants, attendant-drivers and for other purposes. Legislation of this nature is imperative to promote adequate and professional ambulance services for the State.

To complement the updating of everyday emergency care, the State Department of Health is continuing the programs of disaster preparedness with the (a) Emergency Medical Stockpile program (Packaged Disaster Hospitals and Hospital Reserve Disaster Inventory), (b) planning for Emergency Health and Medical Services, and (c) the Medical Self-Help and Cardiopulmonary Resuscitation program.

There are thirty-five hospitals in Arkansas participating in the Emergency Stockpile Program. This participation includes coordination with the staff of Emergency Health Services in planning, training and orientation in use of the Packaged Disaster Hospitals and periodic inspection and inventory of all items contained in the Emergency Medical Stockpile.

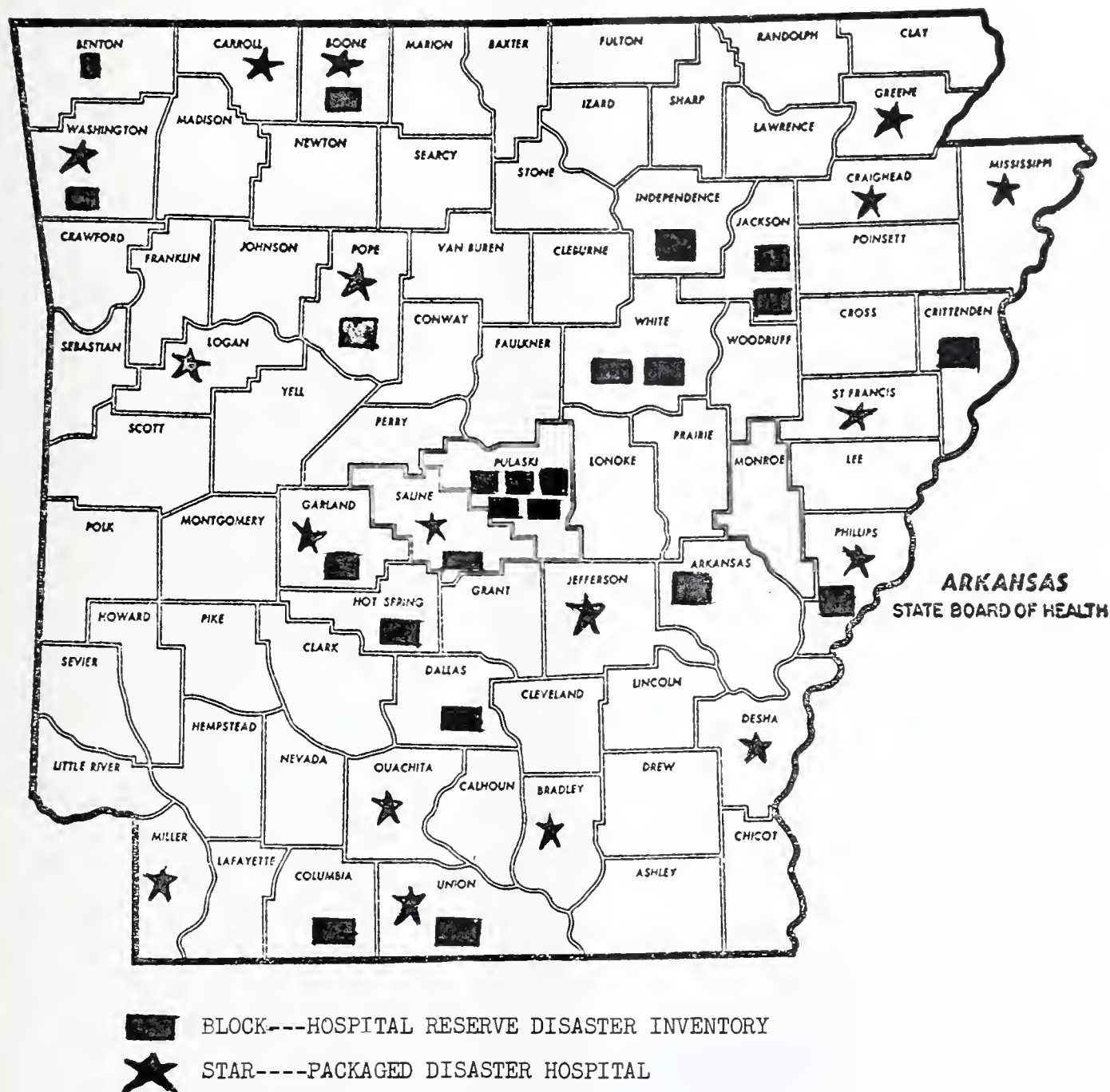
Present emphasis in Health and Medical Services Planning is working with Civil Defense and other related agencies in local communities to develop plans to determine and utilize their emergency capabilities.

The citizens of Arkansas have readily accepted the Medical Self-Help program during the past eight years. 170,000 individuals have completed Medical Self-Help training. Included in certain Medical Self-Help courses is cardiopulmonary resuscitation. In cooperation with the Arkansas Heart Association, over 3,000 persons have been

Medical Services will require the coordinated efforts of all agencies and organizations with a responsibility and/or interest in Emergency Services.

Medical Services will require the coordinated efforts of all agencies and organizations with a responsibility and/or interest in Emergency Services.

LOCATION OF EMERGENCY MEDICAL STOCKPILE





EDITORIAL

Uremia and Anemia

Alfred Kahn, Jr., M.D.

Uremia is a poorly understood condition despite a vast amount of investigative work. A whole issue of *Archives of Internal Medicine* has been devoted to a "Symposium on Uremic Toxins" and guest edited by L. G. Welt, H. R. Black, and K. K. Krueger (*Archives of Internal Medicine Symposia*, Vol. 7, Vol. 126, p. 773, Nov., 1970). Some of the papers in this symposium were very interesting.

Erlev reviewed the "Anemia of Chronic Renal Disease." He points out that chronic anemia may be associated with renal disease due to failure to re-use iron, faulty function of the bone marrow and hemolytic breakdown of cells. The failure of renal excretory function may lead to a delution anemia; shortened red cell life time is usually noted; iron reutilization is subnormal; there is a decreased responsiveness to Erythropoietin; there is increased blood loss due to bleeding. Of importance in understanding this type of anemia is the recognition that the decreased kidney releases inadequate amounts of erythropoietin despite the anemia.

Desforges also has described the "Anemia of Uremia". She reports that hemolysis plays a major role; it is extracorporeal as transfused cells also hemolyze. Uremic cells are frequently structurally deformed and this leads to easy destruction. The hemolysis does not exactly parallel the Blood Urea Nitrogen. The glycolysis of red cells is disturbed in uremia and abnormal amounts of metabolic intermediates are reported to pile up. The red cell membrane is thought to be abnormal in leukemia, and this could lead to anemia. Erythropoiesis is described in uremia — apparently a lack of appropriate response to the anemia due to the failure to produce erythro-

poietin by the damaged kidneys. Lastly, deficiency states are seen in anemia and this can lead to anemia as lack of folic acid, iron deficiencies, protein deficiencies, etc.

"Disorders of Red Blood Cell Production in Uremia" was published by J. W. Eschbach, J. W. Adamson, and J. D. Cook in the same symposium. They used radioactive iron to study red cell kinetics. Normal men have an erythron iron turnover of 0.42 mg. per 100 cc's of whole blood per day. They report that the anemia of phlebotomy will cause red cell production to increase 300% due to erythropoietin; this does not occur in uremia presumably due to failure to produce erythropoietin. Uremic patients have like normal patients two patterns of iron metabolism: one in which the iron is transferred to red blood cell precursors and reappears in red cells and the second in which the iron is stored in liver parenchymal cells and may lead to hepatomegaly. Institution of dialysis in uremic patients leads to improved red cell production in many patients as measured by erythron iron turnover and hematocrits. Hyper-transfusions given to uremics decreased their erythron iron turnover. Their work also supported decreased erythropoietin as a cause of the anemia of uremia; dialysis improved the anemia suggesting the removal of a toxic factor.

Hammond and Lieberman have a paper describing "The Hemolytic Uremic Syndrome," which occurs rapidly in infants and is characterized by bleeding, hemolysis, renal failure, high blood pressure, and myocardial insufficiency. This syndrome has a prodromal phase of ten days or less and is characterized by non-specific symptoms including vomiting, diarrhea, and fever.

The child then goes into an acute phase with marked hemolysis; there are manifestations of uremia. Over 50% of the patients have hemorrhagic manifestations; the platelet count is reduced from mildly to severely; the megakaryocytes are normal in number; plasma fibrinogen may be normal or low; there is increased fibrinolysis; factors V, VIII, IX and XI may be increased. Survival in these cases seems to depend on the severity and the management of the renal failure. The former mortality rate was 40% to 50%, but now it is 15% in some series of 76 patients followed, 33 recovered completely, 20 partially recovered, 7 had severe uremia and 16 had progressive renal disease. Pathologically in the acute phase, bilateral renal cortical necrosis was found. Microscopic studies revealed glomerulitis, vascular endothelial proliferation, and fibrin thrombi in the capillaries. Later biopsies show infarcted areas and hyalinized glomeruli with tubular atrophy and scarring. Antifibrinogen serum showed marked attraction to the capillary walls and also there was staining of the cytoplasm of the mesangial and endothelial

cells. Electron microscopy shows damage to the glomerular capillary basement membrane and deposition of granular material on the endothelial surface of the membrane. It is thought that a virus or bacterial agent could cause this disorder but the reports are inconclusive as to the etiologic agent. The authors comment on the possible relationship of the hemolytic uremic syndrome and the Schwartzman Phenomenon; this cannot be proved at this time. They postulate that the pathophysiology is as follows: infection, platelet aggregation and intravascular clotting, deposition of fibrin in glomerular vessels, patchy renal cortical necrosis and glomerular vascular damage, mechanical injury to red cells and platelets by altered microvascular endothelium in the kidney. Treatment is supportive. Corticosteroids have not been helpful; heparin was not of value in some series but was helpful to other workers.

Our understanding of the anemia or uremia is improved, but our knowledge of this facet of kidney failure is still incomplete.



O B I T U A R Y

Dr. Hans B. Molholm

Dr. Hans B. Molholm died in Little Rock on June 21, 1971, at the age of 72. He was born in Lakewood, Colorado, and had resided in Arkansas since 1958.

Dr. Molholm was graduated from Harvard Medical School, Boston, Massachusetts, in 1931. He practiced for several years in Massachusetts, Ohio, and Missouri, before coming to Arkansas, where he was Director of Research and Education at the Arkansas State Hospital in Little Rock and Associate Clinical Professor of Psychiatry at the University of Arkansas Medical Center. After retirement from those institutions, Dr. Molholm served as a psychiatric consultant.

He was a member of the American Medical Association, Arkansas Medical Society, Pulaski

County Medical Society, American Psychiatric Association, the New York Academy of Sciences, the American Orthopsychiatric Association, and the Little Rock Rotary Club. He was a veteran of World War I.

Dr. Molholm is survived by his widow, Alice, two sons, one stepson, three brothers, four sisters, and one grandchild.



B O O K R E V I E W S

This ATLAS OF DRAWINGS by Dr. Lentz should be a fascinating book to any physician. It will be of special interest to medical students and to physicians who took their training before the Era of Electron Microscopy. The drawings are excellent and the discussions are equally fine. This book is an atlas of Cell Fine Structure.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The House Ways and Means Committee has approved the Social Security Amendments of 1971 (medicare and medicaid changes) and sent the massive health bill to the floor of the House for expected early passage.

As adopted by the committee, the bill concerns itself with the implementation of the Administration's Health Maintenance Organization option for medicare beneficiaries, restricts physicians' fee increases under federal programs, reduces some long-term medicare benefits, and covers under Medicare for the first time disabled social security beneficiaries.

The Secretary would also be authorized to conduct experiments with areawide or community-wide peer review, utilization review, and medical review mechanisms.

Congress failed to pass substantially the same bill during the last session due to major differences between the House and Senate versions and the lack of time to reach agreement.

Medicare beneficiaries would be permitted to have all covered care provided by a Health Maintenance Organization (HMO), defined as a pre-paid group health or other capitation plan, with the government reimbursing the HMO's at 95 per cent of the average cost of medicare beneficiaries in the area.

Physicians' medicare fees would be pegged at the 75th percentile of actual charges in a locality and future increases would be tied to a special index reflecting rising costs. The Department of Health, Education and Welfare could terminate payments to providers found guilty of program abuses.

A medicare co-insurance factor one-eighth of the hospital deductible would be applied after the 30th day. The medicare part B deductible would rise to \$60 a year and medically indigent persons above the poverty level could be required by the states to pay an income-related premium.

Other features of the proposed legislation:

— HEW would be required to develop experiments and demonstration projects designed to

test payment to providers of services on a prospective basis under the medicare, medicaid, and maternal, and child health programs.

— Limits on institutional provider costs to be recognized as reasonable under medicare could be imposed based on comparisons of the costs of covered services by various classes of providers in the same geographical area.

— Medicare would pay for the services of teaching physicians on the basis of reasonable costs, rather than fee-for-service charges, unless a bona fide private patient relationship had been established or the hospital had, in the 2-year period ending in 1967, and subsequently customarily charged all patients and collected from at least 50 percent of patients on a fee-for-service basis. Medicare payments could also be authorized on a cost basis for services provided to hospitals by the staff of certain medical schools.

— HEW would be authorized to establish minimum periods of time (by medical condition) after hospitalization during which a patient would be presumed, for payment purposes, to require extended care level of services in an extended care facility. The attending physician would certify to the condition and related need for the services. A similar provision would apply to post-hospital home health services.

— Present penalty provisions relating to the making by providers of care of a false statement or representation of a material fact in any application for medicare payments would be broadened to include the soliciting, offering, or acceptance of kickbacks or bribes, including the rebating of a portion of a fee or a charge for a patient referral. The penalty for such acts, as well as the acts currently subject to penalty under medicare, would be imprisonment up to one year, a fine of \$10,000, or both. Similar penalty provisions would apply under medicaid.

— HEW would conduct a two-year study of the desirability of covering chiropractors' services under medicare.

The bill allows the HEW Secretary to authorize experiments with methods of medicare reim-

bursement or payment, "with areawide or community-wide peer review, utilization review, and medical review mechanisms," and with performance incentives for intermediaries and carriers.

Another section of the catch-all bill of wide public interest would establish a new family assistance welfare plan. The bill also increases social security case benefits and taxes.

* * *

The House Committee on Interstate and Foreign Commerce has approved a three-part health bill designed to meet the national shortage of medical personnel by 1978.

The proposed legislation would authorize an estimated \$3.3 billion in aid to health profession students and their schools in the next three years and provide the facilities and programs to close the manpower shortages in the health professions within seven years.

The nation's financially beleaguered medical schools would receive \$11,500 for the full-term cost of training each student, an action long urged by the American Medical Association. Saying that the measure was "long overdue," Congressman Paul Rogers (D., Fla.), chairman of the Subcommittee on health, predicts that the legislation will not only solve the shortage of health personnel by 1978, but will provide the necessary groundwork needed if Congress should approve some form of national health insurance.

Under the legislation, expected to pass the house in substantially the same form, each school would receive \$2,500 per student per year for the first three years of training. The grant rises to \$4,000 for the final year. In order to encourage swifter training, three-year schools would receive the same total as four-year schools, but the final year figure would be \$6,500.

Each school must enroll an additional five per cent of students, or ten whichever is the greater, to qualify for assistance. An extra \$1,000 will be awarded schools for each student exceeding this total. The measure will also help establish at least five new medical colleges.

Additional authorizations would provide \$270 million for health manpower initiative awards to establish health education centers, and \$412 million for special project grants for programs in family medicine, physician assistant training, and others. The bill continues support for scholarship and student loans at increased levels.

* * *

An Internal Revenue Service survey of 8,400 health care providers who participated during 1968 in medicare and medicaid, including physicians and dentists, revealed that 83 per cent reported their receipts correctly.

Fifteen per cent of all taxpayers in the study under-reported receipts by an average of \$7,700, according to the IRS, and two per cent over-reported, by an average of \$16,000.

The survey was based in the main on providers of care who as individuals received \$25,000 or more from federal programs. Some 15,000 providers were involved in the study, however the 8,400 studied in detail were selected by a "scientific sampling process," the IRS said.

Forty-seven cases have been referred to the intelligence division for preliminary or full scale tax fraud investigation. However, the IRS spokesman pointed out that these results do not necessarily hold true for the entire health care profession.

* * *

The Justice Department has cracked down on the widespread abuse of "pep pills" by proposing the reclassification of amphetamines and methamphetamines so as to require that they fall in the category of non-refillable perscriptions.

The action would regulate amphetamines and methamphetamines as narcotic substances such as morphine, codeine, and opium as they carry a potential for "severe psychological dependence" with "serious danger" to abusers.

Manufacturing quotas geared to estimated legitimate use and the filing by manufacturers of order forms would be required. However, at least one major manufacturer has endorsed the proposal.

Some lawmakers have complained that Justice did not go far enough and that the order should have included phenmetrazine (Preludin) and methylphenidate (Ritalin).

* * *

Commenting on the appointment of Merlin K. Duval, M.D., by President Nixon as Assistant Secretary of Health and Scientific Affairs, Department of Health, Education and Welfare, American Medical Association President Walter Bornemeier, M.D., said the AMA "enthusiastically endorses" the selection.

Dean of the University of Arizona College of Medicine and former professor of surgery, Dr. Duval, 48, succeeds Roger Egeberg, M.D., who

remains as a consultant on health at the White House and as a special assistant to the HEW Secretary.

Dr. Duval is a member of the AMA's Committee on Undergraduate Medical Education and the Liaison Committee on Medical Education. A graduate of Dartmouth College and Cornell University Medical School (1946), he is a board certified surgeon.

* * *

President Nixon recently signed into law a \$6.9 billion supplemental appropriation bill containing an additional \$100 million for cancer research. The "cancer cure" program would have an independently budgeted research unit within the National Institute of Health with a director reporting directly to the President.

"As I have said before the time has come in America when the same kind of concentrated effort that split the atom and took man to the moon should be turned toward conquering this dread disease," Nixon said in a statement.

Elliot Richardson, Secretary of Health, Education and Welfare, commenting on the President's action remarked:

"I might just say briefly that what has been recognized here is the need for and the opportunity for a degree of the kind of managerial focus that has been effective in marshaling resources in other fields."

"There is a distinction, of course, as the President pointed out in his health message and elsewhere, between this situation and the moon shot in the sense that there is a need and an opportunity for the development of new knowledge. But at the same time . . . there is an opportunity also for the exercise of a central directive authority particularly in those aspects of the work that can be targeted and handled by contract, rather than grants with individual scientists."

* * *

Social Security Commissioner Robert Ball in a recent address on the concept of Health Maintenance Organizations listed six conditions that he considered essential to their success. The first condition, in Mr. Ball's estimation, was that "this way of practicing medicine must be made attractive to large numbers of physicians."

* * *

The following editorial by Ray L. Casterline, M.D., of Medford, Oregon, editor of the *Federation Bulletin*,* appeared in the May 1971 issue of the *Federation Bulletin*, Volume 58, Number 5.

Chiropractic and State Legislative Assemblies: Why Physicians No Longer Can Tolerate Licensed Cultism

Some recent estimates place the number of chiropractors practicing their cult in the United States at about 35,000. Others suggest that there are less than half that number. In contrast to the several hundred thousand physicians who practice scientific medicine, the smaller number of chiropractic cultists might appear to reduce their significance. Yet, the number of patients consulting chiropractors each year may approach three million. Again, not a large number when compared with the many millions who seek and obtain high quality medical care based on the scientific method. But among those receiving such cult-based therapy are many who will delay seeking adequate effective medical care until it is too late. And others will sustain physical injury during applications of the "chiropractic method."

The theory of chiropractic has never been supported by objective evidence and it has been fully refuted by medical science. Yet, chiropractic, the only existing cult which still constitutes a significant hazard to the public, continues because of the tolerance of many otherwise conscientious physicians, as well as powerful political pressure-groups.

The recent report of the Health Manpower Commission¹ recognizes that ideally chiropractic statutes should be repealed to remove the cult's shield of legitimacy. However, the report indicates that such repeal would be unlikely at this time *because of the power of the chiropractic lobby!*

That report could have added that *the* lobby must not be considered a single unit, waiting patiently for someone to challenge the legal sanction given the cult by licensure in all but a few jurisdictions. For highly skilled lobbyists—representing the chiropractic cult—now are reported to be active in state legislative assemblies across the nation. Any legislative bill, no matter how remote its title may seem to be, offers such

lobbyists a vehicle capable of legally increasing the breadth of the definition of the cult. For chiropractors have proclaimed widely their opposition to constraint upon their practice by statutory definition! It would appear that chiropractic has chosen to follow the precept that the best defense is a strong offense. And meanwhile, back at the community medical workshop level, physician tolerance of chiropractors continues.

Thus, when physicians, medical associations and boards of medical examiners tolerate the continued survival of the cult, they bear some of the responsibility for diagnoses delayed until it may be too late, for physical injuries from application of the "method" and the by-product of that practice, an ever-more-powerful chiropractic lobby.

Therefore, board members and other physicians must assume a more militant posture against licensed cultism, the unscientific practice of chiropractic techniques. The goal is clearly in view, the ultimate repeal of every chiropractic practice act in the nation. But, can it be accomplished? Certainly! However, it will take time and try the patience of many. Nonetheless, the stakes are high and physicians no longer can afford the luxury of overlooking their responsibility for the protection of the health of the public.

REFERENCE

1. Report of the National Advisory Commission on Health Manpower, 1967. U. S. Government Printing Office, Washington, D. C.

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THINGS



**TO
COME**

University of Arkansas Centennial Celebration Program

"The Challenge for Changes in the Delivery of Health Services" will be discussed at the University of Arkansas Centennial Celebration Program to be sponsored by the School of Pharmacy at 1:30 P.M. on September 11th in the University of Arkansas Medical Center Auditorium. The topic will be discussed from (1) a consumer advocate's point of view by Mr. Max W. Fine, Executive Director, Committee for National Health Insurance; (2) a State (Administration's) point of view by Governor Dale Bumpers; and (3) a Federal (Administration's) point of view by Dr. M. Keith Weikel, Director, Division of Health Evaluation, Department of HEW. Travel expenses of health professionals attending this program will be tax deductible. Registration will be provided for this purpose. The program is open to the public and there is no admission.

Emergency Health Services Conference

The Emergency Health Services Conference will be held at the University of Arkansas at Little Rock, 33rd Street at University Avenue, on Saturday, September 11, 1971. Registration will begin at 8:00 A.M., with the general session starting at 9:00 A.M.

Eye, Ear, Nose, and Throat Section Sets Meeting Dates

The Eye, Ear, Nose, and Throat Section of the Arkansas Medical Society has chosen October 15 and 16 for their Fall meeting dates. The meeting will be held at the Red Apple Inn at Eden Isle, Heber Springs.

Examinations To Be Given

The American Board of Family Practice will give its next examination for certification on April 29-30, 1972. Deadline for receiving completed applications in the Board office is February 1, 1972. Information regarding the examination can be obtained by writing:

Nicholas J. Pisacano, M.D., Secretary
American Board of Family Practice, Inc.
University of Kentucky Medical Center
Annex #2, Room 229
Lexington, Kentucky 40506



PERSONAL AND NEWS ITEMS

Physician Has Heart Surgery

Dr. R. F. Rhodes of Osceola recently underwent five and one-half hours of heart surgery at Baptist Memorial Hospital in Memphis, Tennessee. Dr. Rhodes reportedly came through the operation with "flying colors."

Hospital Chief of Staff Named

Staff doctors at Forrest Memorial Hospital in Forrest City voted to name Dr. George McPhail chief of staff. Dr. McPhail has practiced in Forrest City for twenty-five years.

Dr. Charles E. Crawley was named vice chief of staff and Dr. Patricia Davis was named staff secretary. Dr. Giles Sexton served as chief of staff of the hospital last year.

Physicians Attend Course

Dr. C. Lynn Harris of Hope, Dr. Robert A. Hayes of Wynne, and Dr. Mahlon Maris of Harrison, attended a postgraduate course in coronary care conducted at the University of Arkansas Medical Center, June 14-18. The course emphasized new diagnosis and treatment of heart disease.

Physician Is Speaker

Dr. Ben R. Lowery of Searcy was a speaker at the Searcy Junior Auxiliary's Babysitting Clinic which was held in June. Dr. Lowery spoke on "Care of the Child." The free clinic was open to junior high school aged youths and other interested persons.

Doctors Butt and Lesh Retire

Dr. W. J. Butt and Dr. Vincent O. Lesh retired from medical practice on July 1st. Both physicians were associated with the University of Arkansas Student Health Center in Fayetteville. Dr. Butt, who served as director of the Center, had been associated with the Student Health Service since 1940. Dr. Lesh joined the Center on a full-time basis in 1963.

Physicians Elected To Membership

Dr. Richard W. Miles of Rogers and Dr. John H. Wesson of Nashville have been elected to active membership in the American Academy of General Practice. As members of the AAGP,

they will be required to complete 150 hours of postgraduate medical study every three years. The postgraduate study program is designed to help member physicians keep abreast of the latest scientific developments in medicine.

Dr. Shorey Elected to Office



Dr. Winston K. Shorey was elected First Vice President of the Arkansas Medical Society at the organization's annual meeting in April.

Dr. Shorey was born in Wheelock, Vermont, on September 14, 1919, and began his formal education at Lyndon Institute, Lyndon Center, Vermont. In 1941, he received his A.B. degree from Dartmouth College, Hanover, New Hampshire, and his M.D. degree was received from the University of Pennsylvania School of Medicine in 1943. Dr. Shorey completed his internship and a medical residency at the Hospital of the University of Pennsylvania, where he subsequently held Fellowships at Pepper Laboratory, and in the Gastrointestinal Section. He was made a Diplomate of the American Board of Internal Medicine in 1953.

Dr. Shorey was commissioned an ensign in the United States Navy in 1942. He served on active duty in 1945-46 and again from 1952-54, attaining the rank of lieutenant commander.

Dr. Shorey has been Dean of the University of Arkansas School of Medicine since 1961, when he moved to Arkansas. He also is Professor of Medicine at the School. Prior to coming to Arkansas, he was Associate Dean at the University of Miami School of Medicine.

Dr. Shorey has served as Coordinator of the Arkansas Regional Medical Program, vice president of the Pulaski County Medical Society (1968), and Chairman of the Arkansas Medical Society's Convention Committee for 1970-71 and 1971-72. He is a member of the Advisory Group, Arkansas Comprehensive State Planning; the Governor's Committee State of Arkansas, Aid to the Handicapped; the Executive Board, Quapaw Area Council, Boy Scouts of America; Rotary International; Board of Directors, Little Rock Rotary Club; and the Grande Maumelle Sailing Club.

Dr. Shorey is married to the former Jeannette Shute McConnell, M.D. They have one daughter, Jeannette McConnell Shorey. Dr. Shorey and his family attend the Second Presbyterian Church where he has served as an Elder since 1968.

Dr. Harrel Receives Degree

Dr. John A. Harrel, Director of the Division of Communicable Diseases, Arkansas State Department of Health, has received his masters degree in public health from Tulane University, New Orleans, Louisiana.

Dr. Barrier Attends Exercises

Dr. Wilbur F. Barrier attended the University of Tennessee Medical Units' commencement exercises in Memphis, where he was awarded a "Golden T." The school confers the "Golden T" awards upon its graduates who are still active in their professions fifty years after graduation. Dr. Barrier received his medical degree from the school in 1921 and has been practicing in Malvern since 1924.

Three Physicians Cited For Service

Three Little Rock physicians were honored during the University of Arkansas School of Medicine's graduation ceremonies for having served as voluntary faculty members without pay. The physicians were Dr. William G. Cooper, Jr., who joined the faculty in 1943 and who is now Clinical Professor of the Depart-

ment of Surgery and Director of Medical Education for the Baptist Medical Center; Dr. Edgar J. Easley, who joined the faculty in 1941 and who is now Associate Clinical Professor of the Department of Medicine and Assistant Director of the State Health Department; and Dr. James W. Headstream, who joined the faculty in 1941 and is now Clinical Professor in the Urology Division.

Dr. Saltzman Certified

Dr. Ben N. Saltzman of Mountain Home has been certified a Diplomate of the American Board of Family Practice. Dr. Saltzman's certification was based upon examinations taken by him in New Orleans, February 27th and 28th.

Physicians Lecture

St. Joseph's Hospital in Hot Springs has initiated a planned continuous education program for its nursing service personnel. Presentations have been given by Dr. Gary Meek, who spoke on monitoring body fluid replacement by means of central venous pressure; Dr. Thomas Burrow, who gave a briefing on the urological system; Dr. Robert Hill and Dr. Vernon Sam-



Dr. Elbert H. Wilkes (left) of Little Rock, accepts the "Physician Courtesy Award" from Mr. Donald W. Stecks, president of the Pulaski County Pharmacists Association. The award was given to Dr. Wilkes by the Pulaski County Pharmacists Association for his courtesy and cooperation with the pharmacists of Pulaski County.

mons, who spoke on intake and output procedures; and Dr. Joe W. Chamberlain, who spoke on diseases of the chest, surgical intervention, and the care of tubes.

Dr. Robinson Commands Hospital Unit

Dr. Guy Robinson of Dumas commanded the 148th Evacuation Hospital, Arkansas National Guard, which trained May 30th through June 12th at Brooke General Hospital facilities in Fort Sam Houston, Texas. The Evacuation Hospital has a personnel of 225 members.

Dr. Franklin Named To Commission

Dr. Robert Franklin of Russellville has been named to the Arkansas Kidney Disease Commission which was created by the 1971 General Assembly. The Commission was formed to assist in the provision of care and treatment, includ-

ing dialysis and transplant operations, for persons with chronic kidney disease.

Plaque Presented To Physician

Dr. M. C. Hawkins, Jr., was honored with the presentation of a plaque by his fellow members of the Arkansas Chapter, American College of Surgeons. The plaque was given to Dr. Hawkins in recognition of his contribution toward getting the Chapter organized in 1942, as well as serving as its first president. The presentation was made by Dr. Porter Rodgers, Jr., secretary-treasurer of the Chapter, to Dr. Hawkins in his home in Searcy.

Dr. Colyar To Practice In Stephens

In addition to his practice in Camden, Dr. Willis O. Colyar, Jr., is traveling to Stephens four evenings a week to treat patients who would

Fourth Generation Medical Graduate



Reading left to right: Dr. Richard C. Dickinson, Dr. Rodger C. Dickinson, Sr., and Dr. Rodger C. Dickinson, Jr. Portrait: Dr. George L. Dickinson.

When Rodger C. Dickinson, Jr., of DeQueen was graduated from the University of Arkansas School of Medicine in June, he became the fourth generation of Dickinsons to be graduated from the University School of Medicine. He is the first known fourth generation graduate in the school's history.

Dr. George L. Dickinson, who practiced in Walnut Springs (Sevier County) in the late 1800's, graduated from the medical school in 1892. His son, Dr. Richard C. Dickinson, was graduated in 1917 and began practicing in Horatio. Two of Dr. Richard's sons became physicians, both were graduates of the University of Arkansas Medical Center. Dr. R. B. "Bill" Dickinson was graduated in 1944 and Dr. Rodger C. Dickinson, Sr., was graduated in 1945.

Dr. Richard C. Dickinson served as president of the Arkansas Medical Society for 1953-54. He was named a "Distinguished Alumnus" of the University in 1953. He and his son, R. B. "Bill", were recipients of the University's Buchanan Award, given to a senior student who maintained a high scholastic average and was voted most outstanding by members of his senior class.

Dr. Richard C. Dickinson and his two sons established the Dickinson Clinic in DeQueen. Although no longer practicing medicine, he continues to go to the clinic each day to keep up with what is going on.

Dr. Rodger Dickinson, Jr., is considering a residency in surgery after he completes his internship next year at Maricopa County General Hospital in Phoenix, Arizona.

have difficulty in going to another town in order to receive medical treatment. Dr. Colyar is in the office of the late Dr. William Bruce Ellis, who was the town's only physician.

Dr. John Honored

A plaque in honor of Dr. Milton C. John was placed in the lobby of the new wing of the Stuttgart Memorial Hospital. The plaque was presented in recognition of Dr. John's devoted and valuable service to the community, the medical profession, and the Stuttgart Memorial Hospital.

Physician Elected

Dr. Charles H. Kennedy of North Little Rock has been elected chairman of the Board of Education of Edgewood Academy, a proposed private school. The Academy plans to conduct classes in temporary facilities on a ten acre site in North Little Rock.

Dr. Herron Receives Award

Dr. John T. Herron, State Health Officer, was awarded the Dr. Tom T. Ross Award for 1971 during the Twenty-third Annual Meeting of the Arkansas Public Health Association, Incorporated. The award is given only to a member of the Arkansas Public Health Association who has contributed outstanding achievements in the

field of public health in Arkansas. The award has only been granted five times since the organization of the Arkansas Public Health Association in 1948.

Dr. Herron has held the highest position in public health in Arkansas for the past twenty years and has devoted his entire working career (32 years) to public health in Arkansas.

Members Attend Meeting

A number of Society members attended the American Medical Association Clinical Meeting which was held June 20-24 in Atlantic City. Among those present were: Dr. Robert Watson, president-elect of the Society; Drs. Purcell Smith, C. C. Long, and T. E. Townsend, delegates and alternate delegate, respectively, to the AMA's House of Delegates; Dr. Joseph Calhoun, who spoke on "Accreditation Standards for Hospital-Based Clinical Services" at the Conference on Revised Hospital Accreditation Standards; Dr. Davis Goldstein, secretary-treasurer of the Fifty Year Club of American Medicine, presented a \$1,500 check to AMA-ERF on behalf of the Club; Dr. Ralph Downs, who had an exhibit at the meeting which exemplified the high points of an article by him entitled "Congenital Polyps of the Prostatic Urethra"; and Dr. G. Thomas Jansen.



ANSWER—Electrocardiogram of the Month

RATE: 83/min. RHYTHM: Sinus
PR: 0.20 sec. QRS: 0.06 sec. QT: 0.32 sec.

SIGNIFICANT ABNORMALITIES:

ST segment elevation & T wave inversion with small Q waves in II, III, avF.

INTERPRETATION:

- Acute Posterior M. I.
- Rhythm Strip No. 1: SR with PR: 0.24 sec. (1st° A-V block)
- No. 2: SC with PR: 0.32 (1st° A-V block)
- No. 3: 2nd° A-V block Wenckebach (Mobitz I)—Progressive lengthening of PR interval (0.25 sec., 0.40 sec.) to a dropped beat
- No. 4: 2nd° A-V block (Mobitz II, 2:1 A-V block)
- No. 5: Electronic pacing of the ventricles at rate 82/min.

Preclinical Hypothyroidism: Risk Factor for Coronary Heart Disease

P. A. Bastenie et al (Hôpital Universitaire St. Pierre, Brussels)
Lancet 1:203-204 (Jan 30) 1971

In a systematic study, 406 women and 400 men admitted to clinical wards for miscellaneous non-thyroid diseases were screened for thyroid antibodies and serum cholesterol levels. The clinical and laboratory data were analyzed by computer. In the female population symptomatic thyroiditis (preclinical hypothyroidism) represents an important risk factor for coronary heart disease (CHD). It abolishes the well-established sex ratio for CHD. Increased levels of serum cholesterol may play a part in this pathogenic mechanism. However, a genetic factor may be responsible both for the tendency to develop atherosclerosis and for the lymphocytic thyroiditis.



NEW MEMBERS

Dr. Ralph E. Ligon

Dr. Ralph E. Ligon has been accepted for membership in the Arkansas County Medical Society. He was born in Moro, Arkansas, and is now a resident of Stuttgart.

Dr. Ligon received his B.A. degree from Hendrix College in Conway and was graduated from the University of Arkansas School of Medicine in 1967. His internship was served at Tampa General Hospital, Tampa, Florida. Dr. Ligon was in the Air Force for two years where he served as a flight surgeon.

Dr. Ligon's office for the General Practice of medicine is in the Stuttgart Medical Clinic.

Dr. Richard W. Miles

The Benton County Medical Society has announced that Dr. Richard W. Miles is a new member of that Society. He was born in Searcy, Arkansas.

Dr. Miles attended the University of Arkansas at Fayetteville and was graduated from the University of Arkansas School of Medicine in 1966. After completing his internship at the University Medical Center, he served for three years in the Air Force.

For the past year, Dr. Miles has been in the General Practice of medicine at the Rogers Medical Center, Rogers, Arkansas.

Dr. Charles Douglas Blackmon

Dr. Charles D. Blackmon, a native of Hot Springs, has been accepted for membership in the Chicot County Medical Society.

He received his B.A. degree from Hendrix College in Conway in 1961, and the following year he received his B.S. degree from Columbia University. In 1968, he was graduated from the University of Arkansas School of Medicine. Dr. Blackmon completed his internship at Hillcrest Medical Center in Tulsa, Oklahoma, and re-

ceived his residency training in Surgery at Barnes Hospital in St. Louis, Missouri.

He is in the General Practice of medicine at 434 South Cokley in Lake Village.

Dr. Thomas L. Buchanan

Dr. Thomas L. Buchanan is a new member of the Conway County Medical Society. He was born in Wynne, Arkansas.

Dr. Buchanan attended Memphis State College in Tennessee, and was graduated from the University of Arkansas School of Medicine in 1967. His internship was completed at Saint Albans Naval Hospital, Queens, New York. Dr. Buchanan served for three years in the Navy.

His office is located at 200 South Moose Street, Morrilton, where he is in the General Practice of medicine.

Dr. C. Wayne Starnes

Dr. C. Wayne Starnes, a native of Greene County, has been accepted for membership in the Greene-Clay County Medical Society.

Dr. Starnes received his pre-medical education from the University of Arkansas at Little Rock and Arkansas State University, receiving his B.S. degree from the latter in 1961. Following his graduation from the University of Arkansas School of Medicine in 1965, he completed his internship at Hillcrest Medical Center, Tulsa, Oklahoma. Dr. Starnes' residency training in Internal Medicine and Cardiology was received at the University of Oklahoma School of Medicine in Oklahoma City.

He has been in practice for two years at 113 West Court, Paragould, where he specializes in Internal Medicine and Cardiology.

Dr. George Collier, Jr.

Dr. George Collier, Jr., is a new member of the Greene-Clay County Medical Society. He was born in Paragould.

Dr. Collier attended Arkansas State University and the University of Miami. He was graduated from the University of Arkansas School of Medicine in 1970 and completed his internship at St. Vincent Infirmary, Little Rock.

Dr. Collier is in the General Practice of medicine at 901 West Kingshighway.

Dr. Ruth C. Steinkamp

Pulaski County Medical Society has announced that Dr. Ruth C. Steinkamp is a new member of that Society.

Dr. Steinkamp was born in Little Rock. She

received her B.S. and M.S. degrees from the University of Texas and was graduated from the University of Arkansas School of Medicine in 1950. Dr. Steinkamp completed her internship at Barnes Hospital in St. Louis, Missouri. She completed residencies in Internal Medicine and Hematology at Barnes Hospital and Washington University in St. Louis.

Dr. Steinkamp has held teaching appointments at Washington University, St. Louis, Missouri, (from 1952 to 1958) and the University of California, Berkeley, California (from 1963 to 1968). She is certified by the American Board of Internal Medicine. She is a member of the American Medical Association, the American College of Physicians and the American Society of Internal Medicine.

Dr. Steinkamp is associated with the Arkansas Regional Medical Program, 500 University Tower Building, Little Rock.

Dr. Ralph Sidney Izard, Jr.

Dr. Ralph S. Izard, Jr., is a new member of the Saline County Medical Society. He was born in Dierks, Arkansas.

Dr. Izard received his B.S. degree from the University of Arkansas in 1959, and was graduated from the University of Arkansas School of Medicine in 1969. His internship was served at Arkansas Baptist Medical Center.

Dr. Izard is in the General Practice of medicine at Bryant, Arkansas.

Dr. John Shelby Duncan

Dr. John S. Duncan, a native of Nashville, Arkansas, is a new member of the Saline County Medical Society.

His pre-medical education was received at Henderson State College, Arkadelphia, from which he received his B.S. degree. In 1964, he was graduated from the University of Arkansas School of Medicine. He completed his internship at the University Medical Center and remained there for a residency in Orthopedic Surgery. He served two years in the Air Force.

Dr. Duncan's office is located at 105 McNeil in Benton.

Dr. David Lloyd Lockhart

Dr. David L. Lockhart has been added to the membership roll of the St. Francis County Medical Society. He was born in Clovis, New Mexico.

Dr. Lockhart received his B.S. degree from Baylor University, Waco, Texas, in 1963. He was graduated from the University of Arkansas School of Medicine in 1968 and completed his internship at St. John's Hospital in Tulsa, Oklahoma. Following his release from the Navy, Dr. Lockhart practiced for a short time in Virginia Beach, Virginia, and in Sapulpa, Oklahoma, before moving to Forrest City, where he is now in the General Practice of medicine at 328 Kittel Road.

Washington County Medical Society announces the addition of six new members to its membership roll. The new members are:

Dr. James Austin Capps, Jr.

Dr. James A. Capps, Jr., is a native of Prescott, Arkansas. He received his B.S. degree from the University of Arkansas at Fayetteville and his M.D. degree from the University of Arkansas School of Medicine in 1965. His internship was served at the University of Arkansas Medical Center and he also completed a residency there in 1968. Dr. Capps served in the Navy from 1968 to 1970.

He is in the General Practice of medicine at the Springdale Clinic, where he associated with Dr. Stanley Applegate and Dr. John R. Power.

Dr. Thermon R. Crocker

Dr. Thermon R. Crocker was born in Lyon, Mississippi. He attended the University of Texas at Austin, Texas, and Mississippi College, Clinton, Mississippi. In 1965, he was graduated from the University of Mississippi School of Medicine and served an internship at the City of Memphis Hospitals, Memphis, Tennessee. He completed a residency in General Surgery at the Veterans Administration Hospital in Memphis, a residency in Otolaryngology at the University of Tennessee and City of Memphis Hospitals, and a residency in Head and Neck Pathology at the Armed Forces Institute of Pathology, Washington, D. C.

Dr. Crocker's office is located at 102 West Dickson, Fayetteville, where he specializes in Otolaryngology.

Dr. James E. Haynes

Dr. James E. Haynes was born in Dumas, Arkansas. He attended the University of Mississippi at University, Mississippi, and the Uni-

versity of Arkansas School of Medicine, graduating from the latter in 1965. His internship in Pediatrics and a Pediatric residency were completed at the University of Arkansas Medical Center.

Dr. Haynes has been in practice in Fayetteville for two years. He specializes in Pediatrics at the Medark Clinic, 207 East Dickson.

Dr. Francis Earl McEvoy

Dr. Francis E. McEvoy is a native of Wilson, Kansas. He attended the University of Kansas, Lawrence, Kansas, and received his M.D. degree from the University of Kansas School of Medicine in 1965. Dr. McEvoy completed his internship and a General Practice residency at Wesley Medical Center, Wichita, Kansas. Following completion of his residency, he was in the United States Navy, stationed in China Lake, California, where he was Chief of Clinical Services.

Dr. McEvoy is associated with Dr. Rogers P. Edmondson and Dr. Tom D. Whiting at the Edmondson Clinic in Springdale.

Dr. Tad M. Morgan

Dr. Tad M. Morgan was born in Leavenworth, Kansas. He received his A.B. degree from the University of Kansas in Lawrence, Kansas, in 1961. In 1965, Dr. Morgan was graduated from

the University of Kansas School of Medicine. His internship was completed at the Wesley Medical Center and he also did a two year General Practice residency at the same institution. Dr. Morgan served for two years in the Navy.

He is in the General Practice of medicine at the Edmondson Clinic in Springdale.

Dr. Lloyd Smith Rolufs

Dr. Lloyd S. Rolufs was born in Herculaneum, Missouri, and attended the University of Missouri at Rolla, being granted a B.S. degree in 1934. In 1938, he was graduated from the St. Louis University School of Medicine. His internship was completed at the United States Public Health Service Hospital, Norfolk, Virginia, and he also had residency training there. Dr. Rolufs' service with the United States Public Health Service extended from 1939 through 1952. From 1952 to 1970, he practiced in Kirkwood, Missouri. Dr. Rolufs held a teaching appointment in surgery at St. Louis University School of Medicine from 1950 to 1970. He is certified by the American Board of Surgery and is a member of the American College of Surgery.

Dr. Rolufs is associated with Dr. Robert A. Etherington at 41 Kingshighway, Eureka Springs, where he specializes in General Surgery.



Lactulose Treatment of Hepatic Encephalopathy in Outpatients

H. Brown (818 Harrison Ave, Boston 02118), C. Trey, and W. V. McDermott, Jr.
Arch Surg 102:25-27 (Jan) 1971

Hepatic encephalopathy has been successfully treated with lactulose (galactose-fructose) made by action of calcium hydroxide on lactose. Nine patients greatly incapacitated by encephalopathy after portacaval shunting were able to continue relatively normal day-to-day living for 6 to 20 months without need for hospitalization because of neurologic symptoms. Sorbitol, a relatively inert sugar, administered in a double-blind prospective study was often as beneficial as lactulose. The mechanism for reducing neurologic symptoms is believed due to decreased absorption of ammonium and other nitrogen-containing compounds from the colon by the cleansing action of catharsis and lowering of colon pH.

Jejunal Diverticula

E. R. Nobles, Jr. (20 S Dudley St, Memphis 38103)

Arch Surg 102:172-174 (March) 1971

Fifteen patients are reported who underwent jejunal resection for a serious complication of jejunal diverticulosis. Five of these were explored because of intestinal hemorrhage. Acute jejunal diverticulitis developed in five patients, and three others required operation to relieve acute intestinal obstruction related to the jejunal diverticula. Two patients were explored for intractable abdominal pain and in both instances resection of jejunal diverticula relieved the problem. In many of these patients the diagnosis of jejunal diverticulosis had been overlooked or ignored for years. The triad of obscure abdominal pain, anemia, and dilated loops of jejunum should alert the clinician to a careful search for jejunal diverticulosis.

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These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

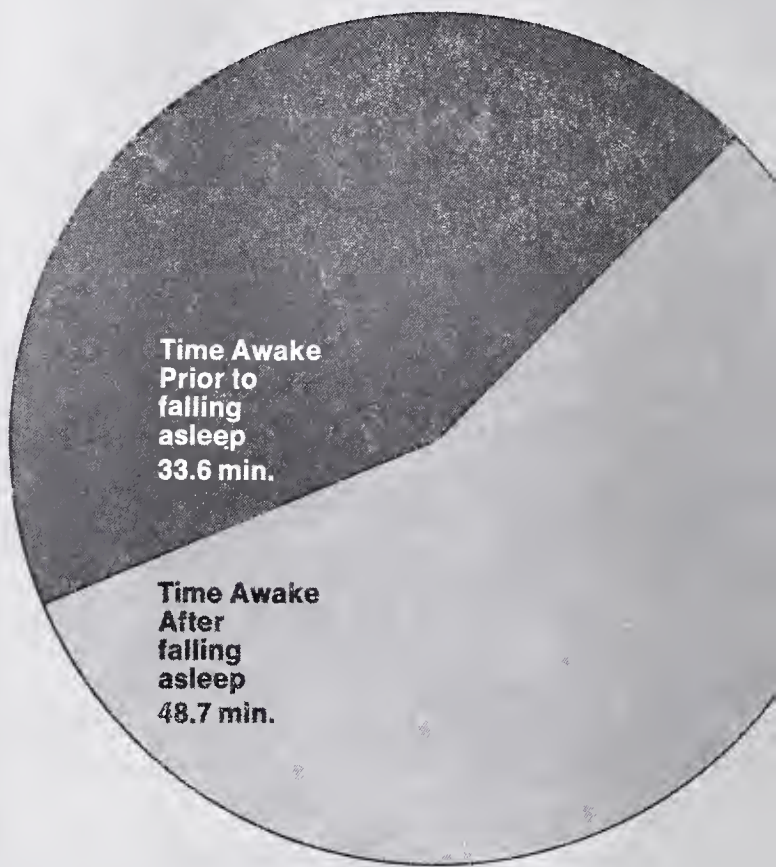
Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

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References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.

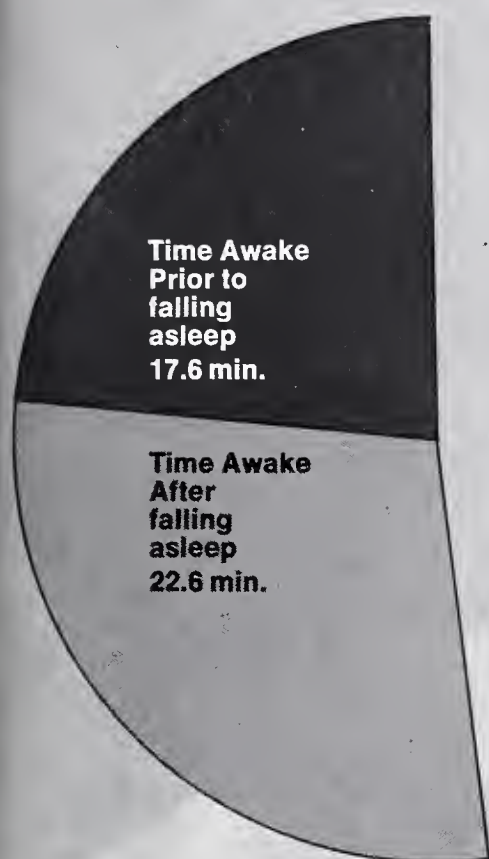
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

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and slept through the night

On
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Average sleep laboratory measurements in cited studies

Parameter	Before Dalmane	On Dalmane
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Wake time after onset of sleep	48.7 min.	22.6 min.
Number of wakeful periods after onset of sleep	12.2	8.4
Total sleep time	420.0 min.	447.5 min.
Total sleep percent	88.6	94.5

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

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Doctor, Your Next Patient Has an Eye Problem*

F. T. Fraunfelder, M.D., F. H. Roy, M.D.**

You're 15 patients behind — your next patient has an eye problem.

The busy family practice physician is faced daily with ocular problems and needs to make rapid decisions, many of which an ophthalmologist would love to refer to an unfriendly competitor, the originator of socialized medicine, or the great hacker, Dr. Elsewhere. Reams of data come from ivory towers, yet few boiled-down practical articles free of research are presented. The purpose of this report is an attempt to present management for the more common eye problems that the non-ophthalmologist sees.

Conjunctivitis:

This is the most common eye disease in America. The usual history is one of a red eye without pain, associated with some exudates usually worse upon awakening in the A.M. The most common causes are bacterial, viral, or allergic. In most cases it is difficult without special tests (cultures, conjunctival smears) to tell the differences clinically between viral and bacterial infections. In general, the bacterial type has more discharge, and is seldom associated with a URI.

There has been a marked increase in gonorrheal conjunctivitis in Arkansas in the past 2 years and this should be considered whenever you see a conjunctivitis which produces more pus than the usual case. The hallmark system for an allergic conjunctivitis is "itching"; in fact, if the patient's presenting complaint is itching around the eyes it is an allergy unless proved otherwise.

Treatment

Viral and Bacterial Conjunctivitis:

(Treat viral and bacterial conjunctivitis the same except if the organism is known.)

- (1) Warn patient about personal hygiene for self and other members of family, i.e., hand to eye contact, common wash cloths, etc.
- (2) Sulfa eye drops, i.e., Vasosulf®, Sulamyd®, Gantrisin®. One drop each eye 4 times daily. May consider a sulfa ointment at bedtime. Patients do not like ointments during the day because their vision is blurred. Ophthalmologists prefer sulfa medication because of low cost and fewer side reactions. One of the reasons for treating viral conjunctivitis is because of possible secondary bacterial invasion.
- (3) The patient in severe cases must be seen daily. If after a few days the patient is worse, cultures should be taken, switch to different antibiotics, i.e., Neosporin®, or obtain consultation.
- (4) Any change in clarity of the cornea demands ophthalmic consultation.

Allergic Conjunctivitis:

- (1) If possible, eliminate the causative agent.
- (2) Stain cornea with fluorescein strip (Fig. 1),

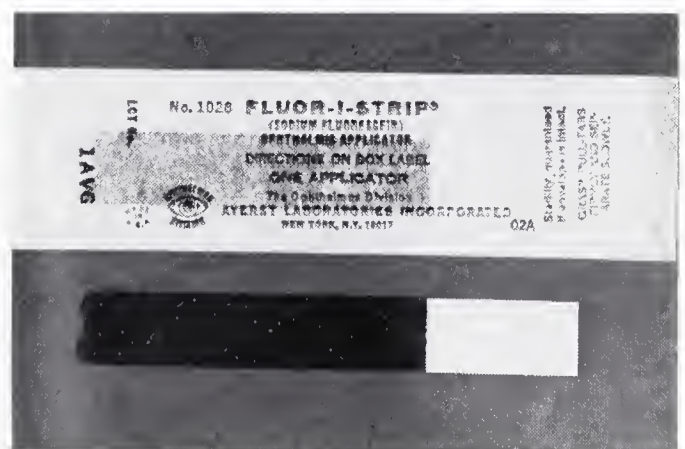


Figure 1
Fluorescein Strip — Made by Ayerst Laboratories or Barnes-Hind. The cost is about 2½ cents per strip.

*Presented at the Annual Meeting of the Arkansas Medical Society, Hot Springs, April 26, 1971.

**From the Dept. of Ophthalmology, Univ. of Arkansas Medical Center and VA Hospital, Little Rock. Supported by NIH Grant RR-5350.

and check for dendritic figures (Fig. 2). A dendritic figure is almost pathognomonic of herpes simplex and topical steroids are contraindicated in this disease. If dendrites are not found, treat with the weakest topical steroid drops that control the symptoms, i.e., 1/8% Imflase® four times daily. If poor results, increase strength to 1% until symptoms are controlled.

Lids:

Hordeolum (stye) is a common staphylococcal infection of the glands around the base of eyelashes. This is characterized by localized swelling, redness, and heat associated with pain. This is an abscess and its treatment is like that of an abscess anywhere in the body. In any lid infection which doesn't respond to therapy, one must always consider a retained foreign body.

Treatment:

- (1) By far the most important is heat — as much and as long as possible.
- (2) Incision and drainage rarely necessary since most spontaneously rupture.



Figure 2

Dendritic Figures — Pattern of breaks in the corneal surface as stained by topical fluorescein which is almost pathognomonic of herpes simplex. Steroids are contraindicated if this condition is present.

- (3) Instill antibiotic solution, i.e., sulfa solution q.i.d. into conjunctival sac to prevent secondary corneal infection.
- (4) Analgesics are sometimes necessary.

Chalazion:

A non-tender granulomatous inflammation of the meibomian gland. This is characterized by a localized non-tender firm mass in the eyelids. There are no signs of inflammation unless it is secondarily infected. Although occasionally chalazion spontaneously resolve, they frequently come to surgical excision if a cosmetic problem.

Blepharitis — Lid Margin Infections:

This is probably the most missed diagnosis of any ocular problem in family practice. Symptoms are commonly that of irritation, burning, itching of lid margin which is worse upon arising in the morning. The eye looks red-rimmed and scales may be frequently seen on the eyelashes. The cause is staphylococcal, seborrheic or the most common type of all, a mixture of both of these. The staphylococcal type is characterized by ulcerations of the lid margin and loss of eyelashes. The seborrheic type is associated with seborrhea of the scalp and brow. The lid margin seldom clear without treatment of the scalp as well. Patients will only put up with the following treatment during acute episodes.

Treatment:

- (1) Treat scalp with weekly or biweekly shampoo for seborrhea if present.
- (2) Have patient mechanically clean lid margins with cotton tip applicator dipped in tap water four times daily then apply Blephamide® (sulfa, steroid, and coating agent) to lid margin and spread with fingertip over lashes. The patient must wash off previous medication before each new application.
- (3) Warn patient—will not cure will just suppress, or decrease reoccurrence rate.
- (4) During peak of inflammation warn women to avoid eye cosmetics.

Cornea:

Abrasion:

Classic symptom is pain, made worse by blinking. The area is easily outlined by topical fluorescein. For medico-legal purposes it is best to take a baseline visual acuity.

Treatment:

- (1) Instill antibiotic ointment.

(2) Apply pressure dressing (Fig. 3).

The key of an adequate pressure dressing is if the dressing is tight enough to prevent elevation of his upper lid. If he can elevate his upper lid, you should reapply your eye pad. The necessity for a tight dressing is to prevent the lid margin from rubbing the abrasion site, thereby impeding corneal healing.

A local anesthetic as a prescription item should not be given to the patient as this retards wound healing and may cause a secondary keratitis.

(3) See daily until healed. If area becomes gray or cloudy, refer to an ophthalmologist to rule out a secondary infection.

Foreign Body:

Diagnosis is best made with magnification (Fig. 4) and good illumination. Corneal foreign bodies are best seen with oblique illumination. If foreign body is not seen, one needs to hunt for them by everting the upper lid and lower lid.

Treatment:

- (1) Apply local anesthetic to get patient's cooperation for the examination.
- (2) Remove the foreign body with a moistened cotton swab or a spud (Fig. 5). A spud is safe since this instrument is designed to prevent perforation of the cornea. Often a foreign body 24-48 hours old is easier to remove than on initial examination since necrosis around the foreign body allows easy removal. If foreign body is near the visual axis, it is best removed by an ophthalmologist since without a slit lamp you may cause a central scar which results in a permanent decrease in central vision.

Under no circumstance should a local anesthetic be given to a patient on a prescription basis.



Figure 3

Pressure Dressing — The most important strips of tape in a pressure dressing are those in a horizontal position across the upper lid. If a patient can still elevate the upper lid after your dressing, your patch has little value.

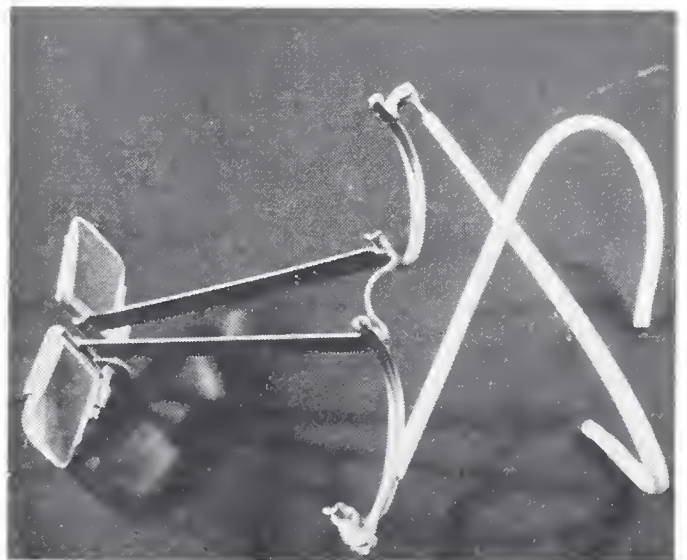


Figure 4

Beebe Binocular Loupe, No. 1603 — Excellent instrument for magnification for most things in a family practice office. Price: \$17, American Optical, Little Rock, Arkansas.



Figure 5

Spud — Used to remove corneal foreign bodies. Major value is that it is difficult to perforate the cornea with this instrument. Model E-840, Price \$9.75, Storz Eye Instruments, 470 Audubon Ave., St. Louis, Mo. 63110.



Transplacental Reversal of Meperidine Depression in the Fetus by Naloxone

Richard B. Clark, M.D.*

Naloxone, the N-allyl derivative of oxymorphone, is a new potent narcotic antagonist. It is approximately 30 times as effective as nalorphine (Nalline) and 4 times as effective as levallorphan (Lorfan) in reversing narcotic-induced respiratory depression.^{1,4} In contrast to nalorphine and levallorphan, naloxone does not produce any depression or agonistic effects in the absence of narcosis,⁵ and, unlike other antagonists, naloxone will reverse the respiratory depression induced by the analgesic pentazocine (Talwin®),⁶ a weak narcotic antagonist.

Stuckey, et al⁷ administered naloxone (5 ugm/kg) intramuscularly to a group of full term new born babies whose mothers had not received any narcotic medication prior to delivery. No significant changes in respiratory rate, tidal volume, apgar score, blood pH and pCO₂ were produced by the injection of naloxone.

Currently available narcotic antagonists have had limited utilization in obstetrics to prevent or reverse narcotic depression in the newborn because of their inherent agonistic properties.⁸ Narcotic antagonists have been administered 1) in combination with the narcotic to the mother; 2) injected intravenously 5 to 10 minutes before delivery; and 3) directly to the newborn.³ The second method is popular in some localities⁹ and is the method we chose to study. The development of a more selective narcotic antagonist which would promptly cross the placental barrier when administered shortly before delivery may offer some advantages to the use of the narcotics during labor. The availability of naloxone, a pure antagonist, prompted our interest in this study.

The object of this pilot study was to evaluate the effects of naloxone in the mother and her newborn when administered shortly before delivery. To our knowledge this has not been studied previously.

Method and Materials

Twenty normal women, at term, in early labor were included in the study. No maternal or obstetric complications were present on admission to the study. All fetuses were in the vertex presentation. Patients were given a meperidine-promethazine (Demerol-Phenergan) mixture (50-75 mg meperidine, with 25 mg promethazine) intravenously during labor, at intervals sufficient to maintain patient comfort. A total dose of 50 mg promethazine was permitted, but no limit to the total amount of meperidine was prescribed. Low spinal anesthesia was administered just before delivery. Delivery was effected either spontaneously or with the aid of low forceps. The newborn was evaluated by Apgar score at one and five minutes after complete birth.

Naloxone was administered intravenously to the mother 10 to 15 minutes before delivery. The mothers were divided into two groups. Group K, the first ten patients received 5 ugm naloxone/kg maternal weight; Group II received 8 ugm naloxone/kg. It has been reported that 5 to 8 ugm/kg is an effective antagonist dose in adults.²

In the interim between Apgar scoring, the newborns were evaluated as to their overall condition and categorized as either "vigorous", "fairly vigorous" or "lethargic".

Results

There were no significant differences in maternal age or weight in the high and low dose naloxone groups. No instances of hypotension nor prolonged or precipitate labor occurred in either group. In each group one patient refused spinal and they were given nitrous oxide-oxygen anesthesia (6 L.N₂O, 2 L.O₂) of short duration.

Group I (5 ugm naloxone/kg)

The meperidine dosage ranged from 150 mg to 275 mg with a mean of 197.5 mg. The promethazine dosage ranged from 25 to 50 mg with a mean of 32.5 mg.

At the one minute Apgar scoring period two newborns scored 6 and one scored 7. The remain-

*Associate Professor, Anesthesiology, and Obstetric Anesthesiologist, University of Arkansas Medical Center, Little Rock, Arkansas.
From the Division of Anesthesiology and Department of Obstetrics and Gynecology.

The naloxone hydrochloride (Narcan®) used in this study was supplied by ENDO LABORATORIES, Garden City, New York.

ing seven newborns scored 8 or 9. At 5 minutes all newborns had Apgar scores of 8 or higher.

One of the two newborns with Apgar 6 scores required forceps rotation, a maneuver which has been shown to cause infant stress⁹ and undoubtedly contributed to his depression.

Between Apgar scoring, four of the newborns were "fairly vigorous" and two were "lethargic". One of the two "lethargic" newborns (Apgar 7) was given 0.02 mg naloxone via the umbilical vein (after 5 minutes scoring) and subsequently showed some improvement. One patient (Apgar 8 newborn) developed uterine inertia and required stimulation with oxytocin.

Group II (8 ugm naloxone/kg)

The meperidine dosage ranged from 175 mg to 350 mg with a mean of 270 mg. The promethazine dosage ranged from 25 to 50 mg with a mean of 42.5 mg.

At one minute the Apgar scores were all 7 or higher. At 5 minutes all newborns had Apgar scores of 8 or higher.

Three of the deliveries were associated with complications, namely, two midforceps rotation and one tight nuchal cord.

Four newborns were rated as "vigorous" and six as "fairly vigorous" between Apgar scorings. None of the newborns were "lethargic". One of the "fairly vigorous" newborns (Apgar 7) was given 0.02 mg naloxone via the umbilical vein with subsequent improvement.

As the study progressed, we developed more and more confidence in the antagonist, hence, the larger total doses of meperidine in Group II. In this small series no relation between the injection-delivery interval and the condition of the newborn was apparent.

The mean values and ranges for maternal age, weight, total meperidine and promethazine dosage, naloxone dose, and injection-delivery interval for both groups are given in Table 1.

Discussion

It would appear from our results that administration of naloxone to the mother shortly before delivery produced considerable reversal of meperidine depression in the fetus. Although the amount of meperidine was not as large as that used in some localities, it was significant, and based on our experience and the experience of others^{10,11} there would have been much more neonatal depression if no antagonist had been

used. These data also suggest that the larger dose of naloxone (8 ugm/kg) was more effective than the smaller dose.

As in all obstetric drug studies, it was not absolutely clear whether the depressed newborns suffered from drug depression, or from the effects of obstetric complications, or both. Even when only normal mothers are selected for study, complications of labor and delivery will invariably cloud the issue. Acid-base and blood gas studies of the neonate would have helped in this regard. Since there were about the same number of delivery complications in both groups, yet the newborns in the second group were delivered in better condition, it can be concluded that their superior condition was due to the larger dose of antagonist.

There are many questions unanswered. For example, would there have been even more reversal at a higher dose, perhaps 10 ugm/kg? Naloxone seems almost innocuous, and virtually no toxic effects have been reported, even with very large doses.¹²

What is the optimal time for administration of the naloxone? The optimal time for nalorphine is 5-15 minutes before delivery.⁸ Would we have noted a superior effect if our injections had been so timed? Not certain whether naloxone would pass the placenta, we injected far enough in advance of delivery to insure passage.

What is the optimal dose of naloxone in regard to the amount of narcotic administered? This would appear to depend upon the degree of reversal desired, sensitivity of mother and fetus to narcotics, anticipated complications in delivery, etc. With large enough doses it would appear that a complete narcotic reversal may be achieved.

Our newborns, although in good condition, were probably not as vigorous as if they had been delivered without analgesia or anesthesia. Blood gas studies during the first few hours of life could clarify this aspect. Nalorphine and levallorphan are said to produce only 80% reversal.⁹ In adequate dosages naloxone will completely block narcotic effects.¹³

Even if naloxone did produce complete reversal, narcotic induced maternal respiratory depression during labor might still affect the fetus. The antagonist could be given with each dose of narcotic, but that would likely reduce the analgesic, as well as other depressant effects.¹⁴

Further studies are contemplated. Placental transfer rates, evaluation of the newborns, not

only with Apgar scores but also with blood gas studies, and variations in the injection-delivery interval are planned.

Guy H. Gross, M.D.; James Hahn, M.D.; Virgil Hayden, M.D.; and N. K. Pal, M.D. aided in this investigation.

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ABSTRACT

Analgesia was administered with a meperidine-promethazine mixture parenterally to twenty obstetric patients. Shortly before delivery, the new narcotic antagonist, naloxone hydrochloride, was given intravenously to the mother, in a dose of 5 micrograms per kg. maternal weight for the first ten patients, and 8 micrograms per kg. maternal weight for the second ten patients. Despite the significant amounts of meperidine utilized, the antagonist produced transplacental reversal of narcotic depression, with delivery of the newborns in good condition. The higher naloxone dose schedule (8 micrograms per kg.) appeared more effective than the lower dose (5 micrograms per kg.).

TABLE I
MEAN VALUES AND RANGES IN GROUPS I AND II

	GROUP I		GROUP II	
	5 ugm naloxone/kg (10 Patients)†		8 ugm naloxone/kg (10 Patients)	
	<i>Mean</i>	<i>Range</i>	<i>Mean</i>	<i>Range</i>
Age (Years)	22.6	15- 35	22.9	17- 38
Weight (KG)	74.2	48- 110	73.7	55- 98
Meperidine (MG)	197.5	150- 275	270.0	175- 350
Promethazine (MG)	32.5	25- 50	42.5	25- 50
Naloxone (MG)	.37	.24-.55	.59	.44-.78
IDI (Minutes)*	21.1	10- 38	25.0	7- 40

†Two patients in Group I were primgravidas; all other patients were multigravidas.

*Injection-delivery interval.



Endocrine and Metabolic Disorders in Bronchial Carcinoma

J. G. Azzopardi, E. Freeman, and G. W. Poole
(Royal Postgraduate Medical School, London)
Brit Med J 4:528-529 (Nov 28) 1970

The incidence of endocrine disturbances was established in a series of 185 patients with histologically typed bronchial carcinoma. Cushing's disease was present in only 0.5% of cases. The syndrome of inappropriate secretion of anti-diuretic hormone was present in 1.5% of patients. Both these syndromes have a specific association with oat cell carcinoma. Hypercalcemia, not due to bone metastases, was the most common disorder, occurring in 6% of patients. It is most frequent with squamous carcinoma and uncommon with the other types. Hypertrophic osteoarthropathy was found in 1.5% of patients and gynecomastia in only 0.5%. These figures probably err on the low side, especially in the case of gynecomastia.

δ-Aminolevulinic Acid Dehydratase in Blood Cells: Test for Lead Poisoning

J. B. Weissberg, F. Pipschutz and F. Oski (1740
Bainbridge St., Philadelphia 19104)
New Eng J Med 284:565-568 (March 18) 1971

Using a simple micromethod for the determination of red cell δ-aminolevulinic acid dehydratase, an inverse correlation has been demonstrated between enzyme activity and blood lead levels. It has been shown that δ-aminolevulinic acid dehydratase activity is a sensitive index of subclinical lead poisoning, more so than either urine coproporphyrin or urine δ-aminolevulinic acid. Enzyme levels were lower in children living in deteriorated slum housing of the inner city than in children living in better housing in urban and suburban areas. Assays for this enzyme will serve both as a practical screening test for unrecognized plumbism among suspect populations and as an adjunct to the rapid diagnosis of acute lead poisoning.

Mental Health and the Rural Aging*

Ben N. Saltzman, M.D.**

Throughout my professional life and even before, I have maintained a keen interest in the problems of mental health. Prior to acquiring a medical education, I acquired a Master of Arts degree in psychology. In medical school and through an internship, residency and military service in World War II, I was constantly confronted with abnormalities of behavior that both intrigued and challenged me. I did not become a psychiatrist because I was more interested in treating the patient as a whole than as part of a limited specialty. Yet, I wanted to know more about the mental and emotional conflicts that affected my patients.

My practice began in a rural community in northern Arkansas known as Mountain Home in Baxter County, some twenty-four years ago. My patients at first were farm and hill people of all age groups. They presented with all sorts of medical and surgical problems overlaid with emotional and mental patterns that provided me with a comprehensive pattern of most of the ailments that affect humanity. In those early days, I even got to treat a few animals. Believe me, treating those animals did alleviate considerable anxiety on the part of some of my farm patients, particularly the men.

As time went on, my practice began to change. I found myself working in a retirement area, still rural in nature but involving an older age group. My patients came from all walks of life. Many were retired farmers and their wives, but many also were city people who wanted to retire to the simple life; who wanted to fish and hunt and grow flowers and vegetables and grow old gracefully.

The problems of rural people became a way of life with me. I was early appointed as chairman of the Rural Health Committee of the Arkansas Medical Society, chairman of the Committee on Rural Health of the American Academy of General Practice and later a member and chairman of the Council on Rural Health of the American Medical Association. In other words, I became an expert by virtue of appointment. This so-

called expertise apparently qualified me for other appointments since I represented, from the health standpoint, some fifty-five million people, or one-fourth of the population of this country. Hence, today I find myself to be a member and chairman of the Committee on Mental Health of the American Academy of General Practice, and a member of the Health Advisory Council for Health Services and Mental Health of the Department of Health, Education and Welfare. All this biography leads into my reasons for being here before you today.

From early on in my practice, I noted that rural people had many of the same mental and emotional problems that their urban counterparts had. However, I also noted that comparative isolation tended to aggravate these problems. I also was made aware that it was difficult to cope with such problems in a rural environment. There was no psychiatric help within one hundred and fifty miles. There were no hospital facilities for intensive care for even greater distances. At first there were no drugs that could be of help. My chief concern was that I did not feel adequate to treat these problems. Many changes have taken place, but before I go into them I believe that you would be interested in knowing something about the mental and emotional conflicts with which as a physician I have been confronted.

I recall early in my career as a country doctor a frantic phone call from the sheriff's office asking me to come out into the country to give a shot to an elderly lady who had gone completely berserk. I could get no further information, so I grabbed my medical bag, hopped in my jeep station wagon and headed out along a hot dusty road into an interesting adventure. About six miles from Mountain Home, I found the sheriff's car parked near a farmhouse. There were about eight people standing about, all with looks of dismay and anxiety, and apparently all waiting for me. I didn't see anything like the person described to me over the telephone. I was informed that the lady had taken off down the road; that she had resisted all attempts for help and had actually fought off the helpers; and that I was to pursue her and give her

*Presented to a Conference of Green Thumb and Green Light executives. Little Rock, Arkansas; January 6, 1971.

**126 West 6th, Mountain Home, Arkansas 72653.

a shot to quiet her down so that she could be taken to the State Hospital. I could get no volunteers to help me, so I went it alone. I found the lady about a mile down the road. I was able to induce her to get into the car because the poor creature was completely psychotic, having no conception of who and where she was. I believe that she listened to me because I was a complete stranger. She resisted only slightly when confronted with the injection. I believe that subconsciously she was looking for help. The sheriff took her to the State Hospital in Little Rock and I learned that she expired about one year later with complete mental deterioration.

This was the pattern for many of my cases. As time went on, I observed that more and more I was confronted with older people, many beyond help, who would require hospitalization, who I probably would never see again. Until recently geriatric psychiatry has been a neglected topic. I was not alone in my ignorance of the mental health of the elderly person. Psychiatrists generally felt that the older person could not be reached with psychotherapy. They felt that because of memory defects and inflexibility of character nothing could be done for him. You know, psychiatrists are human, just as you and I. They have unresolved Oedipus complexes and are therefore hostile to the older patients. They have sometimes over-identified with this type of patient, especially if they themselves belonged to the same age group. The patient was often treated symptomatically, especially if the symptoms could be tied down to some organic cause. They looked for physical illness in the geriatric patient rather than for an emotional disorder. The usual treatment was electric shock, multivitamins and narcotic drugs.

When is a person considered to belong to the geriatric or old age group? Most statistical studies pick the age of 65. This is usually retirement age and thus lends itself better to study. In this country mental illness is now the third ranked cause of chronic illness. There seems to be an increasing rate in first admissions to mental hospitals. In true psychosis, cerebral arteriosclerosis (hardening of the arteries of the brain) one of the chief illnesses of older people, has had a rate increase of five times the amount for mental disease in general. The rates for mental illness are at a maximum in the older age groups. Thirty percent of state hospital residents over the country are

over 65 years of age. A great problem exists in that more than half of the total hospital beds in the United States are psychiatric beds. Thus, we do have a serious problem with our aged population.

I know that it would be of interest to you to know what the serious disturbances of mental health in the aged are:

"Brain Syndrome" is the name given to a group of symptoms which occur in the presence of impairment of brain tissue function. The symptoms are impairment of orientation, memory, all intellectual functions and judgment and liability and shallowness of affect. Orientation is the ability to recognize one's own location in time, space and situation. Disorientation means confusion, a common occurrence in older people. Memory impairment may be recent or remote. Impairment of intellectual functions leaves the individual with the inability to understand abstract situations, to calculate, to retain previous knowledge and to learn new things. Lack of judgment and shallowness of affect are characterized by mood changes such as laughing and crying at inappropriate times.

These disorders are classified as acute and chronic. The acute have sudden onsets without brain damage and are characterized by returns to relative normalcy. There is early confusion, occurrence at night when normal stimuli are absent, restlessness, rambling talk, and marked emotional change with delirium. Sometimes, fright, hallucinations and delusions, irritability and even violence occurs. Usually this type is brought on by acute infections, intoxications, trauma, and heart failure and resolves with the resolution of the acute problem. With the Chronic Brain Syndrome there may be delirium, but impairment of memory, intellectual functioning and judgment are far more characteristic. Acute confusion occurs periodically. Personality changes become more marked. These include hallucinations, delusions, marked paranoid trends with accompanying neurotic overlay. Causes are circulatory disease, cerebral arteriosclerosis, mental and physical stress and senile brain disease. This condition is more common in women by a ratio of two to one. Paranoid reactions are the most common. In mild cases this can lead to suspicions of family members, the changing of wills and so on. In all cases, questions of legal competence come up. These people become dependent upon relatives or upon

society for management of all aspects of daily living.

Psychogenic factors influence the appearance of organic syndromes. They are made worse by anxiety, depression and general environmental conditions.

Psychological illnesses are characterized by disorders without clearly defined physical cause or accompanying structural change in the brain. These include the involuntional psychotic reaction with depression, noted particularly in women undergoing the so-called change of life. The symptoms are transitory crying spells, hot flashes, irritability, worry, insomnia, anxiety and agitation, guilt feelings, feeling of worthlessness, delusions and paranoia. There may be some manic-depressive symptoms.

The environment plays a great part in the development of psychotic depression. The elderly individual is particularly vulnerable since he is in a period of life in which he experiences more serious and frequent losses and suffers injury to his self esteem. Previous personality patterns have a great deal to do with paranoid reactions. This type of person is affected by insecurity, loneliness, fears and unfulfilled wishes. Delusions are concerned with property, money, hostility of neighbors and sexual designs of men. There may be hallucinations of hearing, and judgment is seriously disturbed.

Psychophysiological disorders are usually related to the gastro-intestinal tract. As social interests diminish, attention centers around basic things in life such as food, elimination of body wastes and general body comfort. Constipation is a chief complaint.

Psychoneurotic patterns are all based upon the occurrence of anxiety in the individual. Hypochondriacal patterns are most prevalent in middle and later years and thus make up the chief neurotic complaints of the aging patient.

It is fairly well recognized that there is a strong interrelationship between physical and emotional functioning in the elderly person. A physical disorder will affect the person's emotional state, and conversely an emotional disorder will affect his physical functioning. We, as physicians, must be prepared to treat both aspects of the lives of our aging patients. We must attempt first to forestall emotional problems by keeping them sound in their earlier years. We know that a person's personality and character will follow him into his old

age. The sounder he is emotionally in his early years, the more he will be able to withstand the trauma of aging.

R. R. Lackney of Toledo, Ohio, states that whether or not they are aware of it, people "prepare" to grow old as early as their forties. "At that age most men and women begin to retreat or disengage from life. Symptoms of disengagement include:

1. A developing desire to cling to the past and 'the good old days.'
2. An inability to acquire new interests.
3. Annoyance with many everyday activities which previously seemed acceptable.
4. Feelings of discomfort and even pain caused by heightened noise levels which are not noticeable to younger persons.
5. Growing withdrawals from family relationships.
6. Gradual slowdown of physical and mental processes.
7. Increasing dependence upon drugs for control of behavior."

Other factors that minimize the effects of aging are good physical health, retention of the use of the sense organs, above-average intelligence, many social contacts, higher economic level, working as long as possible and good relationship with one's children. Anything that will keep the elderly person in the mainstream of life will prevent regression or deterioration, or both. If the individual loses contact with other persons in old age, irrevocable changes can result.

We, as physicians, are advised to encourage our older patients to continue to work if possible; to maintain interests, activities and hobbies; and to participate in social organizations for both the elderly and persons of all age groups. We are asked to be patient, calm and supportive, see or visit the patient more often, and give him more time. We must attempt to treat the emotional factors that may magnify a regression due to the impairment of brain function. We can recommend changes in the patient's life that might minimize the effects of impairment. We must work with the patient's family to understand the problem, emphasizing hopeful aspects as well as obvious negative aspects. We can play a significant role in the community by promoting the need to maintain special organizations and facilities for the elderly.

Dr. Prescott W. Thompson of the Menninger Foundation writes: "The provision of mental health services for the elderly is an urgent problem. There are too few psychiatrists for the task and there is great difficulty regarding their availability for such services. There should be better working relationships between psychiatrists and other physicians. In addition, close members of the patient's family should be effectively involved in the treatment situation. Older people with serious problems can be helped substantially. The fundamental attitudes involve respect for the individual and for the difficulties inevitably encountered in trying to help him; understanding, concern and respect—these three. And the greatest of these—and the hardest to come by—is understanding."

Along this line, you may be interested in what we are trying to do to solve the psychiatrist shortage problem. I mentioned that I have been appointed chairman of the Committee on Mental Health of the American Academy of General Practice. The goal of this committee is to encourage general physicians nationwide to seek post-graduate education in psychiatry to enable them to better understand the mental and emotional problems that confront them in daily practice. They are encouraged to treat those problems that they feel they can handle and refer those that they cannot. At the present time, this committee is working under a NIMH grant for this very purpose. Cooperating, is a committee of the American Psychiatric Association and three committees on higher education on the regional level. In the past five years there has been increasing interest on the part of the general medical profession along this line.

My interest has gone even further. Last year I was instrumental in acquiring a mental health clinic for Baxter County. This clinic serves six counties in North-Central Arkansas and is known as the Ozarks Regional Mental Health Center. We are now working toward making this into a full time center. The state of Arkansas and the Federal Government along with local governments are funding regional clinics and centers over the state. The need and efficacy of this service is well documented and recognized. The clinics provide for a team of professionals, including a psychiatrist, a psychologist and a social worker to visit regional facilities on a periodic basis to provide mental health services, both diagnostic

and therapeutic. The centers provide this service on a full time basis. This has been a very successful endeavor and, in fact, is a true example of a partnership in health. The medical profession and the consumers are pleased with government's role in this respect.

Recently I read an article by Dr. Alvin Goldfarb, writing in the Medical Clinics of North America that I would like to share with you. He presents a "Test to Evaluate Mental Impairment in the Aged" to assist the general physician's accurate evaluation of his aged patient's mental disorder or impairment. The answers to 10 questions tactfully worked into the examination usually reveal the presence and degree of brain syndrome.

One wrong answer indicates mild or no brain syndrome.

Three to eight wrong answers indicates moderate to severe brain syndrome.

Nine to ten wrong answers suggests severe brain damage.

A person who answers less than three of these wrong, yet appears to be confused is probably not senile. He may well have an affective disorder which is highly responsive to psychiatric care.

The questions are:	Measure orientation for:
1. Where are we now?	Place.
2. Where is the place (located)?	Place.
3. What is today's date (day of month)?	Time.
4. What month is it?	Time.
5. What year is it?	Time.
6. How old are you?	Memory—recent or remote.
7. What is your birthday?	Memory—recent or remote.
8. What year were you born?	Memory—remote.
9. Who is President of the U.S.?	General information—memory.
10. Who was President before him?	General information—memory.

Much information and knowledge has been accumulated for prevention and treatment of mental illness in the aged. The following are known to play a role: Chemotherapy, electroshock therapy, individual and group psychotherapy, golden age clubs, senior citizen leagues, home care programs, meals on wheels, extension

of social service facilities, special dwellings, communities for the elderly, and better use of leisure time. Recently in Arkansas, the Green Thumb and Green Light programs have served useful preventive and therapeutic purposes. I am well acquainted with one man who suffered a myocardial infarction and followed his recovery instructions to the letter. However, he insisted on going back to his Green Thumb job as soon as possible because he took pride in the work he was doing and because he missed the companionship of his fellow workers. I know of a lady who was retired as a bank teller but who came to work in our mental health clinic as a Green Light worker and has been one of the most efficient and reliable workers in the clinic. She loves the work and loves to help others. It is my feeling that these two programs should be extended. The workmanship exhibited by the men far surpasses anything in small industry today. The pleasure they glean from accomplishing something useful and productive must not be overlooked as a means of safeguarding their mental health. Even if funds are curtailed, the experienced workers should gather about them a corps of volunteers and continue to be useful and productive in their communities.

Dr. Gunnar Biorck of Stockholm, Sweden believes that useful lives are more important than longevity. He feels that it is more important to stimulate people to lead emotionally inspired lives even though some may die suddenly—perhaps as early as their forties. He seriously “questions the wisdom of giving too much emphasis to scientific methods for a further prolongation of life.”

We are faced with a continuing problem in our country today. Our culture is such that after recovery or maximum improvement of medical conditions in geriatric patients, many cannot be discharged from community hospitals because families are unwilling or unable to take them. This situation exists in very few countries outside the United States. In many countries there are no nursing homes. The children or nearest relatives are expected to care for their own. In fact, should they fail to do so, they would be ostracized by the community. Our culture is in

definite conflict with the needs of the elderly. The young depreciate the old, and the old depreciate themselves. Dr. Jacob Friedman puts it well when he states, “it is hypocritical to hold a gold watch ceremony when an individual retires from his job, for it actually signifies that the retirement hours can be counted with unnecessary accuracy.” In primitive societies, the aged are looked upon with respect, prestige and wisdom and their advice is sought. We equate loss of prestige and loss of respect with aging. We must reeducate ourselves so that the aged will resume their former superior status in society.

“Contrary to conventionally held views, the majority of older persons surveyed in California were not afraid to die. Most people believe that aged persons are preoccupied with dying and death, especially their own, and are fearful and apprehensive.” This report is the result of a survey made by researchers at the University of Southern California. Most people stated that if an incurable disease were found, “they would favor withdrawal of all treatment except those designed to maintain comfort and reduce pain. Most wanted to be told if they had an incurable disease. The majority preferred to die at home. Older people who were contacted were not at all hesitant to discuss death and dying, contrary to commonly held ideas.”

This discourse has been long and at times rambling. I have delved into the problems of mental and emotional health of the aging in our country. The rural environment can and often does aggravate the problem because of comparative isolation of individuals, lack of productive opportunities and distance from professional help. Attempts are being made to correct these shortcomings, but a great deal more must be done. We must overcome apathy and more constructively we must combat the loneliness of old age.

Matthew Arnold once said, “One’s age should be tranquil, as childhood should be playful.—Hard work at either extremity of life seems out of place.—At mid-day the sun may burn, and men labor under it; but the morning and evening should be alike calm and cheerful.”



I Went to the A.M.A.—I Recommend it to You

Robert Watson, M.D.*

With Dr. Stanley Applegate, President of our State Medical Society being unable to go, it was my good fortune to attend in his place the past American Medical Association meeting in Atlantic City, and to attend an A.M.A. meeting in a depth and detail I had never before experienced.

In past years on rare occasions and maybe in part as a disguised vacation trip, I had spent an odd afternoon looking through exhibits, or maybe dropping by to hear some specific scientific presentation that interested me, but never before had I specifically planned to spend a full week to better acquaint myself with and to have a first-hand experience in watching our state and national medical representatives at their work.

Without the advantage of past experience to tell me otherwise, I had assumed that those who represented our profession at this national meeting were likely to be doddering old men, long past the age of professional usefulness, who sat with bowed and nodding heads while some other badge-wearing colleague presented himself from the speaker's platform in an equally unimpressive manner. But, to the contrary, it was a pleasure and a reassurance to see and talk with these delegates and officers from over the country, and to learn that they were active practicing physicians, people who dealt with and daily "laid their hands" on their patients, just as we do, and to learn that the problems of concern to those other doctors from all over this country are very much the same problems that concern us here in Arkansas.

I found every branch of clinical medicine to be well represented by these men (even eight of my neurosurgical friends were encountered, each serving in some official capacity). Each doctor impressed me with the evident sincerity of purpose that brought him to this meeting. All thought and expressions seemed dedicated toward the betterment of existing medical care for our patients, and at no time during my week at this meeting did I hear any mention of deer camps, turkey hunts, trout fishing on White River, nor any speculation as to how Razorback football might fare this fall.

Every day was a full and busy one, and an all-

day Saturday meeting of the organization of State Medical Association Presidents, lasting from 9:00 A.M. until 5:00 P.M., passed with unbelievable speed, because all problems presented were of interest and were applicable to each of us.

Forty-six state presidents or their alternates were there, representing fifty states and two territories, and the morning was spent in group discussions regarding such matters as medical student participation in county and state medical society functions, means of encouraging medical school teaching staffs to participate actively in the county and state medical societies, how the problem of the foreign graduate practitioner is being met in the individual states, what is the extent of responsibility of the peer review committee, and what legal protection is provided for it, Medicare problems existing in the individual states, fragmentation of state and county medical organizations, and other subjects of equal concern to the medical profession.

Saturday afternoon was given to a panel discussion on "Medical Care Foundation Problems."

Sunday morning began with a 7:30 prayer breakfast, followed by a three-hour panel discussion of the varied problems of professional liability insurance—to me a somewhat unappealing subject for so early a discussion on any Sunday morning.

Sunday afternoon began with the opening session of the House of Delegates, followed by a speech from our outgoing national president, Dr. Walter C. Bornemeier.

Monday morning through Thursday noon was spent in attendance at the meetings of the House of Delegates; attendance at several reference committee meetings, particularly those of reference committee A, which I found to be most controversial and entertaining; and in participation in the inaugural ceremonies Wednesday evening of our incoming national A.M.A. President, Dr. Wesley W. Hall. My attendance at his inaugural reception was highlighted by a brief personal conversation with Dr. and Mrs. Hall, at which time I learned, among other things, that he was born and reared in Mississippi, just across the river from McGehee.

President Richard Nixon's visit and address on Tuesday morning afforded a much appreciated

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break in our schedule. His visit gave me some insight into security precautions not before witnessed. Security preparation became well evident a full twenty-four hours before the President's arrival, and firemen, policemen, street maintenance employees, electricians, and others dressed in working men's clothes were seen throughout the previous night and well into the following morning. Of particular interest were those innumerable young men of almost identical age and dress, each neatly attired in an inconspicuous business suit, but each with the same gold chevron-like lapel button, some carrying walkie-talkies, others with only an inconspicuous ear phone in place, but all obviously fulfilling customary and well established assignments.

Seemingly, no facet of security was overlooked. I saw one of two neatly dressed young men raise the lid of a storm sewer or some manner of underground utility passageway, enter it, and emerge at the next exit a block away. Later, I saw two others slowly make their way down a hallway leading to the ballroom where the President was soon to speak, carrying a stepladder that enabled one of them to methodically, at six-foot intervals, climb the ladder, lift aside an acoustic tile ceiling panel, and with head and shoulders protruding through the opening, inspect the full extent of this hallway where the President was soon to pass.

I was impressed with the warmth, sincerity, and apparent good intent of the President's speech. A well informed individual later told me that the President had, himself, asked that he might speak to the doctors at this A.M.A. meeting. I feel there is definite significance that his manuscript presentation was to cover a fifteen-minute interval of time, but through his own apparent enthusiasm and enjoyment he spontaneously extended his remarks another receptive and well appreciated sixteen minutes' time. That part of his speech that stands out most in my memory was that he said, "I want to have a doctor who is available to me, I want the assurance that he is well trained and capable, and most of all, I want him to be of my own choice."

During this week at the A.M.A. many thoughts came to my mind. Some conclusions were reached, and many expressions of thought were heard from our officers, delegates and participants at various reference committee meetings. With some I am in agreement, but with others I am not.

Particularly, I was impressed with the sincere

concern and intent of everyone there that American medicine provide the best possible health care for every American—and at reasonable cost. Also, it was enlightening to see the extreme degree of democracy that prevailed at this meeting, in which any physician in attendance had the assurance that his voice could be heard in matters directly pertaining to problems of medical care in this country. Most of all, it was reassuring that the feeling was very evident to all that American medicine is not accepting an attitude of resignation and passive acceptance toward present-day problems, but that American doctors, themselves, are best capable of solving problems of American medicine. Even our national director of the Social Security Administration was quoted as saying that no form of medical care would work well if it were not to the satisfaction of the doctor providing it.

Other discussions, random and unrelated, some of which were quite controversial, were: that Health Maintenance Organizations are a sound concept that deserves to be tested; that our present shortage of doctors is due not alone to the number of doctors, but also to existing inadequate distribution; that medical schools are in part to blame for the existing shortage of general practitioners, since those individuals directing the thought and training of young men today are not influencing them toward channels of general practice, but that instead, "specialists tend to breed specialists"; that through the provision for physicians' assistants, health care services can become available to more people; that some manner of intervention is demanded to lessen the burden of malpractice insurance, realizing that annually doubling and tripling premium costs must eventually be passed on to the patient; that some communities have become disenchanted with Regional Medical Programs, while these programs are being commended in other communities; that the law establishing Regional Medical Programs was written originally to aid medical education, rather than to provide health care; and particularly, that in America forces are standing by and anxious for the opportunity to take over the control of medical care should we choose to follow a course of apathy, lack of concern, and selfish indifference for our responsibility toward the preservation of the private practice of medicine in this country of ours.

I was impressed by what I saw and heard at the national A.M.A. meeting—I hope to see more of you doctors there next year.

Report of AMA Meeting

June 20-24, 1971

Atlantic City, New Jersey

Purcell Smith, Jr., M.D., Delegate*

This report is a summary of the more significant actions of the House of Delegates at the June 1971 Annual Convention. There was no picketing or other disruption of the AMA meeting this year. There were 158 items of business before this 120th Annual Convention, and, in addition, the House of Delegates heard a speech by President Nixon as well as speeches by the outgoing and incoming presidents of the AMA.

Dr. Charles A. Hoffman, West Virginia, was chosen president-elect of the AMA.

President Richard Nixon discussed the current debate on national health insurance, emphasizing that "I believe that the most expensive plan that has been offered, a plan for nationalized compulsory health insurance, is the plan that would actually do the most to hurt health care in this nation." He emphasized that America's health care system needs reform, but added that "We can never improve our country's medical system by working against our country's medical profession. No system of health care will ever work unless the doctors of the nation make it work." The bulk of the President's 34-minute talk was a challenge to America's physicians to assume leadership in curing and preventing drug abuse. That problem, he said, "is America's public enemy number one. It afflicts the rich and the poor, the blacks and the white, the servicemen and the civilians, and the ghettos and the suburbs. It spreads like a plague throughout our society. It erodes our nation's strength. It destroys our nation's spirit. And worst of all it undermines our nation's future."

President Nixon encouraged physicians to be more active in politics and community leadership.

The AMA responded to the President's challenge with a report from the Board of Trustees (Report EE) which the House adopted. The re-

port points out that "in respect to the urgent problems of drug abuse, the Council on Mental Health and its Committee on Alcoholism and Drug Dependence have already given support to the President's announcement of the establishment of a Special Action Office of Drug Abuse Prevention within the Executive Office and to his proposal to strengthen resources and programs for treatment and rehabilitation of drug dependent persons." The report recommended and the House adopted as policy that the AMA "strengthen and expand its program to combat drug dependence with particular attention to prevention, identification, treatment, rehabilitation and research and that state and local medical societies be urged to give priority to the implementation of this program at the community level throughout the nation."

Dr. Walter Bornemeier, outgoing president of the AMA, made his final report to the House of Delegates. He particularly discussed the necessity for increasing the availability of medical care. He indicated that along with increasing the number of physicians being produced by the nation's medical schools, that "group practice appears to be the answer" to availability. "Groups can be either fee for service or have a prepaid package arrangement. They could be a combination of the two." President Bornemeier indicated his firm conviction that if we bring comprehensive medical care back into the population centers, the neighborhoods, and have medical care available 24 hours a day, seven days a week, the people will tell Congress that the present system does not need to be restructured.

The House of Delegates was addressed by Dr. Wesley Hall, incoming president of the AMA. In his inaugural address the AMA's 126th president traced the growth of medicine from ancient times to the present, and then detailed some of the profession's more pressing problems of today,

*4001 West Capitol, Little Rock, Arkansas 72205.



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A revealing picture of child abuse patterns is

provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the series as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influence of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain^{1,2} leading to this conclusion, and one³ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of

them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function, increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function, increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values, metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, *J. Coll. Gen. Pract.* 13:267-279 (May) 1967. 2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, *Brit. Med. J.* 2:193-199 (April 27) 1968. 3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, *Brit. Med. J.* 2:651-657 (June 14) 1969. 4. Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives. An Epidemiologic Case-Control Study, *Amer. J. Epidemiol.* 90:365-380 (Nov.) 1969.

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including the state of medical education; the need for more manpower; care for the poor; and rural health. He encouraged physicians to "trumpet our successes while we drive all the harder in those areas where we have not yet obtained perfection."

Included among Dr. Hall's several suggestions was a constitutional convention by the American Medical Association, to "streamline our governing process to suit the needs and pace of the twentieth century physicians and its people, to combine overlapping functions within our organization, and to enfranchise those whose voices we should hear." Other suggestions included at least one additional meeting day for the House of Delegates to conduct its business; re-examination of the aims and duties of the 100 or more councils, committees, and commissions; moving through state organizations to bring a greater number of young, able, and productive physicians into the AMA; setting a limit upon the number of terms delegates could serve in the House of Delegates; and rescinding a number of outdated and long-ignored resolutions that remain on the books as policy statements.

The Board of Trustees brought before the House the question of a constitutional convention, as suggested by Dr. Hall; delegates voted to defer action until the 1971 Clinical Convention, meanwhile requesting informational "white papers" on the subject from the Council on Constitution and Bylaws, and the Council on Long Range Planning and Development.

The House of Delegates acted on 104 resolutions, 31 reports from the Board of Trustees, and numerous reports from various councils. Some of the major items discussed are listed below:

1) **CHANGES IN ORGANIZATION:** The Guam Medical Society of Agana, Guam, was accepted as a constituent association of the AMA, bringing to 55 the number of state, commonwealth and territorial associations. The scientific Section on Psychiatry and Neurology was separated to form two sections, the Section on Psychiatry and the Section on Neurology. The Bylaws of the Association were amended to create a new membership classification; under "Active Members" there are two classifications, Regular Members and Direct Members. There is no

change in the definition of Regular Members, but Direct Members shall include service members, physicians employed by federal agencies, interns, and residents.

2) **RIGHT OF ACCESS TO MEDICAL CARE:** The House elaborated its existing policy regarding the right of access to medical care by adopting this statement: "It is the right of every citizen to have access to adequate medical care, but it is the responsibility of the citizen or of society to seek it. The American Medical Association will use all means at its disposal in an endeavor to make adequate medical care available to meet the needs of each person. The AMA cannot assume the responsibilities of government or the individual citizen. The AMA also recognizes the right of the physician to choose whom he will serve and the conditions under which he will render this service. These are integral essentials in the delivery of quality medical care."

3) **DRUGS AND DRUG ABUSE:** This subject was covered earlier in the report, regarding the action taken by the Board of Trustees and House of Delegates in response to President Nixon's speech. The House also resolved to "follow studies being conducted to ascertain the relationship between proprietary drug advertising in the mass media and excessive use of self-prescribed drugs and drug dependence problems." Delegates also resolved to urge physicians to limit their use of amphetamines and other stimulant drugs to specific, well-recognized medical indications. The House also went on record as favoring the implementation of stern measures for narcotic traffic control in Vietnam, as well as measures for the identification, prevention, diagnosis, and adequate treatment of addicts within the armed forces with adequate provision for the availability of proper follow-up and aftercare.

4) **TERMINOLOGY AND DEFINITIONS:** The House recommended that the term "physician's associate" be used only to denote another physician; the term "physician's assistant" would be more appropriate for a non-physician.

The House of Delegates has adopted three definitions in the area of peer review. "Peer Review" was defined as evaluation by practicing physicians of the quality and efficiency of services ordered or performed by other practicing physicians. Peer review is the all-inclusive term for medical review efforts. Medical practice

analysis, inpatient hospital and extended care facility utilization review, medical audit, ambulatory care review, and claims review are all aspects of peer review. The second definition was "Medical Practice Analysis" and this was defined as a function of the medical society, or other organization authorized by the medical society, designed to coordinate all peer review efforts of a community. Medical practice analysis focuses on the development and application of criteria for optimal medical care, and evaluates the individual and collective quality, volume, and cost of medical care wherever provided. The third term was "Claims Review" and this was defined as peer evaluation and adjudication of claims questions referred for peer review by any party with a valid interest in the case.

5) **PEER REVIEW:** In further connections with peer review, the House resolved that the AMA and its constituent associations reaffirm their support of voluntary mechanisms of review and education by physicians such as grievance committees, insurance review committees, and so forth; and that the AMA and its constituent associations continue to stress that peer review shall be considered a professional function, and as such shall be carried out by physicians or under the sponsorship of the county and state medical societies.

6) **BETTER HEALTH AND PATIENT CARE:** The House adopted a statement that the physician consulted by a teenage girl for contraceptive advice should be free to prescribe or withhold contraceptive advice in accordance with his best medical judgment and the best interests of the patient. Earlier in that report, the House inserted the statement that "definite effort should be made to obtain consent from the minor's parents or legal guardian whenever possible." The House urged that medical societies support the education of patients and the public regarding the spread of venereal disease, and it also reiterated its cooperation with the National Commission on Venereal Disease. Considering the use of assistants in medical practice, delegates resolved that "the physician may properly delegate technical procedures to an allied health worker" but affirmed the principle "that whatever privileges may at any time be granted either to allied health workers or to independent limited practitioners, by law or otherwise, such

grant in no way circumscribes the physician's authority in that field and in no way restricts the practice of medicine by the physician."

7) **HOUSE OFFICERS AND MEDICAL STUDENTS:** The House recommended to county medical societies that reduced membership dues be provided for House Staff members. Support was given to efforts to increase Federal aid to medical students, and state and local societies were encouraged to promote community programs that would provide loans for medical students agreeing to return to the community after training. AMA members were encouraged to assume sustaining membership in the Student American Medical Association.

8) **ADDITIONAL ACTIONS AND EVENTS:** The House adopted a Judicial Council report reaffirming the position "that the basic principles of a fair and objective hearing should always be accorded to the physician whose professional conduct is being reviewed. These basic guarantees are: a specific charge, adequate notice of hearing, the opportunity to be present and to hear the evidence, and to present a defense. These principles apply when the hearing body is a medical society tribunal or a hospital committee." The Sheen award (including a check for \$10,000) was presented to Dr. Maxwell Finland of Boston. It was announced that Dr. Richard Wilbur, deputy executive vice president of the AMA, has been named by President Nixon as Assistant Secretary for Health and Environmental Affairs of the Department of Defense. Dr. Wilbur is taking a leave of absence from his AMA position.



Glucose Tolerance and Insulin Response in Atherosclerosis

J. M. Sloan, J. S. Mackay, and B. Sheridan (ICI
Pharmaceutical Div, Macclesfield, England)
Brit Med J 4:586-587 (Dec 5) 1970

Oral glucose tolerance tests were carried out on 51 male patients with atherosclerotic peripheral vascular disease, none of whom were known diabetics or had suffered recent myocardial infarction. The plasma insulin and blood glucose responses were compared with 47 age- and sex-matched controls.

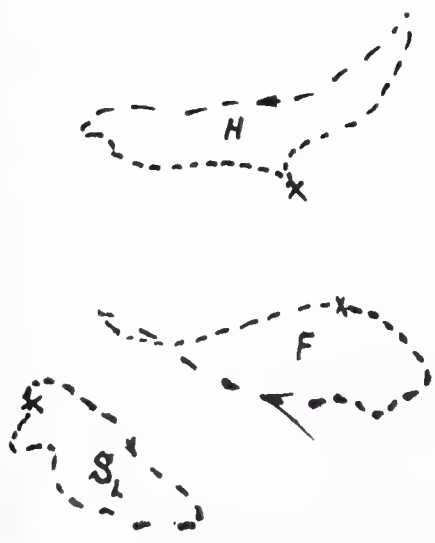
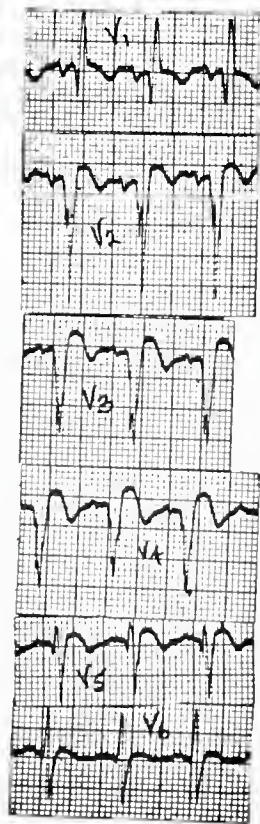
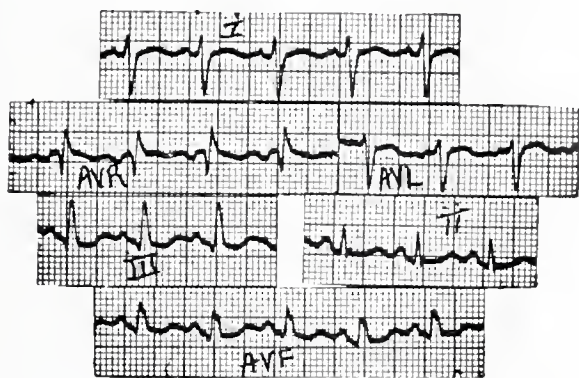


ELECTROCARDIOGRAM

OF THE MONTH

HISTORY AND PHYSICAL EXAMINATION: 48-year-old white male who 6 weeks previously had severe myocardial infarction, and 4 days thereafter developed grade iv/vi systolic murmur, loudest along left sternal border.

(See answer on Page 149)



The Department of Cardiology, University of Arkansas Medical Center
A. J. Thompson, M.D., Fellow Cardiology



The Maternity and Infant Care Project in Arkansas

The Arkansas Maternity and Infant Care Project is one of 55 similar projects in the United States. It is funded through the United States Public Health Service to the Arkansas State Department of Health. The project, which is a joint effort with the University of Arkansas Medical Center, has provided care and services for over 6,000 maternity patients and their infants since its inception in 1965.

The Project is designed to locate patients in early pregnancy who, because of low income and low financial resources, receive poor or no prenatal care, have high incidence of pregnancy complications, or have given birth, in the past, to infants with major handicapping conditions.

The Maternal and Infant Care Project is a comprehensive program of preventive health services and medical care for maternity patients who have or are likely to have conditions which are hazardous to themselves or to their infants. Each mother in the Project is given prenatal, delivery and post partum care for three months after delivery and their babies receive free medical care until one year of age.

The implementation of care and services of the Project involves a cooperative effort by the Maternal and Child Health Division of the State Department of Health and the University of Arkansas Medical Center.

The Department of Health supports several maternity and well baby clinics in the nine county area (Arkansas, Conway, Garland, Grant, Jefferson, Lonoke, Perry, Pulaski, and Saline) included in the Maternity and Infant Care Project. The University of Arkansas Medical Center (Department of Obstetrics and Gynecology and Department of Pediatrics) provides definitive care, preventive diagnostic studies and follow-up of all project patients.

Personnel for the Project include an Obstetrician (Project Director), Pediatrician (Pediatric

Coordinator), Anesthesiologist, Fetologist, Nurse Coordinator, Public Health Nurses, Nutritionists, Home Economist, Social Workers, Biostatistician, Administrative Assistant and Clerical help. These personnel are assigned to the Medical Center and State and Local Health Department offices.

Certification of Project patients is a two-step process involving financial and clinical evaluation. The financial qualification is the responsibility of the Administrative Assistant in the Department of Health and the clinical eligibility is determined by the Project Director, serving as Obstetric Coordinator.

Patients may file an application for Project services at any of the local Health Departments in the Project area or at the University of Arkansas Medical Center clinic. A patient approved both administratively and clinically will receive prenatal care and delivery services at the Medical Center. The University of Arkansas Medical Center is reimbursed for those services authorized for the individual patient.

All maternity patients in the Project area may attend their local Health Department Maternity Clinics without cost to the patient. Infants born under the project may attend well baby clinics at local public Health Departments or at Arkansas Children's Hospital or University Hospital.

In the nine county area, the infant mortality rate has dropped from 25.5 per 1,000 live births in 1965 to 19.9 per 1,000 live births in 1969. During this time the national rate dropped only four points; from 24.7 to 20.7 per 1,000 live births.

The average weight of infants born under Project coverage has risen from 2,733 grams in 1965 to 3,128 grams in 1969. These are evidences that progress is being made in the field of maternity and infant care which contributes toward the goal of healthier mothers and babies.



EDITORIAL

Physicians' Sound Tape Library

Alfred Kahn, Jr., M.D.

It has become trite to compare the human mind to computers, and yet we often lose track of this important concept. A computer cannot function any better than the program which is, so to speak, fed into it; the human mind has the same limitations. Ideas are the tools of the mind, but they have to be imparted in a manner so that the recipient mind is receptive. Pioneers in psychology and learning were aware that there are good and bad methods of programming human minds — teaching. Lecture courses can teach fairly well — provided the lecture does not exceed the span of attention; lectures plus visual and audio aids are superior to the didactic lecture. A lecture plus audio and visual aids plus self participation has been proved to be one of the best ways of teaching, if not the best.

There has been real progress made in the areas of audio and visual aids, and for that matter in self-teaching by participation. Dr. Kerrison Juniper, Jr. at the University of Arkansas School of Medicine is pioneering this work in the Arkansas area. His department is making teaching aids for audio-visual learning that can be used by the medical student, the graduate student, and the practicing physician. These units cannot simply be thrown together. They require careful composition as to the amount of material to be taught, the mode of presentation, the colors to be used, the length of the presentation, the type of illustrations, etcetera. An improperly prepared unit is not substitute for good classroom instruction. Audio visual instruction can easily be combined with so called programmed learning in which the student participates by testing himself after the instructions; this type of self-participation enables the student not alone to learn at his own best speed, but again psycho-

logical testing has proved this method of learning to be far faster and more thorough than any other type.

To augment learning in Arkansas are several new programs as noted above, the University of Arkansas Medical School is making audio-visual units on various subjects. The University of Arkansas library is now offering free library information service over a toll free line. A third facility is the Physicians Sound Tape Library.

The Physicians Sound Tape Library for Arkansas, sponsored by the University of Arkansas School of Medicine, the Arkansas Regional Medical Program, and the Veterans Administration Hospitals, was installed Feb. 9, 1971, in the Admitting Office of the Veterans Administration Hospital in North Little Rock. Most of these tapes were purchased from Wisconsin's Dial Access Program. This system provides 6-13 minute sound recordings covering 500 selected medical topics, considered relevant to the practice of medicine, between the hours of 8:00 AM to 12:00 midnight. Special toll-free telephone lines are available for this service. This program should not be confused with the Medical Center's free Library Information Service for Physicians, which also uses a toll-free telephone line and is supported by the Arkansas Regional Medical Program.

The Sound Tape Library was established in Arkansas because it was thought that an immediate source of selected fact on various medical problems would help physicians in their everyday care of patients. These tapes also can be used for review purposes. They were prepared by recognized experts and are periodically updated. Currently a new catalog is being pre-

pared for the tape library, which it is hoped will be easier to use and which will list the 100 tapes recently added to the system.

Initially this system saw reasonable use, but recently the use has decreased to the point where it is necessary to evaluate the need for this feature.

One measure of the success of any program is the amount of use it gets. A program which is not well used either has not been widely enough sold to its potential users or else it is a fundamentally unpopular, unusable program. The Physicians Sound Tape Library is a worthwhile, fine teaching method and it merits wider usage.



THINGS



TO COME

The Arkansas Medical Society, in cooperation with the American Medical Association, is co-sponsoring a program of seminars and a lecture in the medical sciences to be given during the 1971-72 academic year. The purpose of the lecture is to inform students and faculty of recent developments and to stimulate interest in the medical sciences.

Dr. Paul Zee, Chief of Nutrition and Metabolism at St. Jude Children's Research Hospital in Memphis, will speak on "Nutrition of the 'Haves' and 'Have Nots'" at the following schools: Southern State College, Magnolia, November 1, 1971; Henderson State College, Arkadelphia, November 2, 1971; Arkansas Polytechnic College, Russellville, November 3, 1971; University of Arkansas, Fayetteville, November 4, 1971.

Dr. I. Frank Tullis, Director of Clinical Research Center at the University of Tennessee in Memphis, will speak on "Obesity—An Incurable Disease?" at the following schools: State College of Arkansas, Conway, November 11, 1971; Arkansas A & M College, College Heights, November 12, 1971.

Dr. Robert W. McCammon, Director of the Child Research Council at the University of Colorado Medical Center in Denver, will speak on "Foods, Fads, Fat and Facts in Healthy People" at the following school: Arkansas State University, State University, October 13, 1971.

Dr. Edgar S. Gordon, Professor of Medicine at the University of Wisconsin Medical Center in Madison, will speak on "Diabetes and Heart

Attacks—Two Interrelated Diseases" at the following school: Ouachita Baptist University, Arkadelphia, November 23, 1971.

International Academy of Proctology to Meet

The 24th Annual Congress and Teaching Seminar of the International Academy of Proctology will be held at the Town and Country Hotel in San Diego, California, April 7-14, 1972. Registration fee is \$50.00 for physicians attending. For further information write: Dr. Alfred J. Cantor, Executive Officer, International Academy of Proctology, 147-41 Sanford Avenue, Flushing, New York 11355.



PROCEEDINGS OF SOCIETIES

The Ouachita County Medical Society

Due to the concern of local physicians for the increasing abuse of amphetamines and amphetamine-like drugs as diet pills and stimulants, members of the Ouachita County Medical Society agreed at its meeting in July to limit the prescribing of the drugs to the treatment of narcolepsy and hyperkinesia. Dr. Tom J. Meek, president of the Society, said the physicians felt that whatever good the drugs are in aiding weight reduction is far outweighed by the dangers inherent in their use.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The Congress has been asked by the Administration to authorize an additional expenditure of \$155 million for the control of drug addiction. In his special message to the House and Senate, President Nixon said: "If we cannot destroy the drug menace in America, then it will surely destroy us."

The Administration's program would:

- Make Veteran's Administration facilities available to all former servicemen in need of drug rehabilitation regardless of the nature of their discharge and provide \$14 million for this program.
- Seek \$105 million from Congress to be used solely for treatment and rehabilitation of drug addicts.
- Request an additional \$10 million to improve education programs on dangerous drugs.
- Request special legislation permitting the government to use information obtained by foreign police and other technical measures to make it easier to prosecute drug pushers.
- Asks for an additional \$25.6 million for the Treasury Department to expand efforts against smugglers.
- Request \$2 million to expedite research and development of detection equipment and techniques.
- Request \$2 million for the Agriculture Department to develop herbicides that would destroy narcotics-producing plants.
- Request \$1 million for assistance to other nations in training law enforcement officers.

Implicit in the Presidential drug control proposal is the endorsement of the use of methadone in the treatment of Vietnam veterans addicted to heroin. This high level sanction of the heretofore somewhat controversial and experimental use of methadone marks a turning point in the nation's attempt to rehabilitate addicts. Observers believe the decision to make wide-scale use of methadone was influenced by official recognition of the discouraging low "cure" rate from other approaches to the problem.

Named by the President to head the new drug

control program was Jerome H. Jaffe, M.D., a Chicago psychopharmacologist and director of the Illinois State Drug Abuse Program. Dr. Jaffe, an advocate of the methadone treatment method, will serve as a White House consultant until the new agency is organized.

Shortly after the announcement of the new drug control program, President Nixon asked the American Medical Association's House of Delegates meeting in Atlantic City to join in the nationwide war on drug abuse.

After detailing at some length the growing social dangers of drug abuse, the President said that there was a link between the inappropriate use of drugs within the medical context and the abuse of drugs outside that context.

"Consider these facts for a moment: In the last four years alone, the production and distribution of tranquilizers in our country has doubled. During 1970, 5 billion doses of tranquilizers, 3 billion doses of amphetamines and 5 billion doses of barbiturates were produced in this country. Listen to this: The estimate is that 50 percent of the amphetamines and barbiturates were diverted into illegal sales. So there is a problem in the terms of education as well as enforcement."

"Tranquilizers, amphetamines and barbiturates, as you know, are known as psychotropic or mind-altering drugs. It is estimated that one-third of all Americans between the ages of 18 and 74 used a psychotropic drug of some type last year. And little wonder—for there were enough drugs of this type available last year to medicate every adult in the United States at very high dosage rates for more than 11 days.

"We have produced an environment in which people come naturally to expect that they can take a pill for every problem—that they can find satisfaction and health and happiness in a handful of tablets or a few grains of powder."

* * *

In addition to his call to physicians to assist in the drug control program, the President in his Atlantic City address also challenged organized medicine to provide the leadership "this country craves for" in all areas of health care.

"The health of America is in your hands, and by its health I speak not just of its physical health (but) its mental health, its moral health, its character," the President said.

In immediate response to the President's challenge to American Medicine, the AMA's special communications program answered the Chief Executive's call for physician leadership in a full page message that appeared in many of the nation's principal newspapers. The message, titled "We accept, Mr. President", responded point-by-point to Mr. Nixon's request for broad physician support in all aspects of the nation's health.

* * *

In a recent letter to the Bureau of Narcotics and Dangerous Drugs the AMA has stated that it will do everything possible to assist in implementing a proposed regulation that will curb the abuse of amphetamines and methamphetamines. "Physicians throughout the nation are concerned about the alarming dimensions of the drug abuse problem," wrote Richard S. Wilbur, M.D., AMA's deputy executive vice-president. Pointing out that while the proposed regulation reclassifying amphetamines and methamphetamines as narcotic substances such as morphine, codeine, and opium would add to the inconvenience of physicians in their practices through additional requirements concerning ordering, recordkeeping and prescribing," Dr. Wilbur assured the Bureau that most physicians were in accord with the proposed regulation.

The AMA letter followed quickly after the House of Delegates meeting in Atlantic City in late June adopted the following resolution:

Resolved, That the American Medical Association urge all physicians to limit their use of amphetamines and other stimulant drugs to specific, well-recognized medical indications, and be it further

Resolved, That the American Medical Association support the proposal of the Bureau of Narcotics and Dangerous Drugs to transfer Amphetamine and Methamphetamine and their Salts, Optical Isomers, and Salts of their Optical Isomers from Schedule III to Schedule II published in the May 26, 1971 *Federal Register*.

Congressman Paul G. Rogers (D-Fla.), chairman of the House Commerce Subcommittee on Public Health and Environment, has lauded the AMA for being in the forefront in the support of the Health Manpower and Nurse Training

legislation. In a letter addressed to the AMA Washington office, Congressman Rogers wrote:

"The date and expertise of the Association's witnesses were most helpful. The AMA's governing body wisely included medical manpower legislation as a part of the Association's legislative package. I feel this legislation is a keystone to any additional health programs that may be passed by the Congress."

* * *

Full funding of a number of new and continuing health programs has been urged by American Medical Association officials appearing before a House appropriations subcommittee.

Maternal and child health care, communicable disease control and vaccination assistance, alcoholism prevention and treatment, and regional medical programs, as well as a number of newly proposed programs for the development of medical manpower, were endorsed with a request for full funding by Raymond T. Holden, M.D., a practicing physician in Washington and a member of the AMA Board of Trustees.

Dr. Holden stressed "the urgent need of increased financial support for the continuation of existing medical schools and for the continued development of new schools." He also asked for the subcommittee's full support for nursing education, and the development of allied health personnel to meet the manpower needs of the nation's health care delivery system.

Dr. Holden gave the AMA's support to the programs of prevention and control against venereal disease, rubella, measles, Rh disease, poliomyelitis, diphtheria, tetanus, and whooping cough. He noted substantial progress in the past in reducing the incidence of diseases covered by the former Vaccination Assistance Act, but added: "we are greatly concerned with reports that indicate declining levels of immunization protection against measles, poliomyelitis and diphtheria, in the United States."

The AMA spokesman also urged the subcommittee to appropriate the full \$100 million authorized by the Comprehensive Alcohol Abuse, Treatment and Rehabilitation Act.

In terms of economic loss, the unproductiveness of the alcoholic during his 30's, 40's, and 50's is augmented by the several billions of dollars industry loses annually through absenteeism and on-the-job accidents related to alcoholism and alcohol abuses.

Reminding the subcommittee that while the

1972 fiscal authorization for Regional Medical Programs (heart, cancer, stroke and kidney disease) is \$150 million. Dr. Holden said, "We do not believe the \$52 million currently requested for support is sufficient to adequately meet the needs for continuation and expansion of appropriate programs under this legislation, even though some \$34 million may remain available from previous appropriations."

COUNCIL MINUTES

August 8, 1971

The Council of the Arkansas Medical Society met August 8, 1971, at the Coachman's Inn, Little Rock. The meeting was called to order at 12:00 noon by Chairman C. C. Long. Present were: Applegate, Watson, Shorey, Shuffield, Saltzman, Raney, Edwards, Lazenby, Irwin, Duzan, Bethel, Kirby, Henry, Koenig, Verser, Ellis, Hyatt, Whittaker, Kennedy, Fowler, P. Smith, Henry Hearnberger, Edgar Easley, Harry Hayes, John C. Wright, John M. Tudor, James L. Dennis, Charles W. Silverblatt, Walter J. Morrison, Ph.D., Mr. Warren, Mr. Harris, Mr. Schaefer, and Miss Richmond.

The Council transacted business as follows:

1. Upon the motion of Saltzman and Kirby, the Council voted to authorize travel expenses for Dr. Betty Lowe to attend the Conference on Physicians and Schools in Chicago, September 30-October 2.

2. A. The Council voted to co-sponsor the AMA regional conference on Relationships Between State Medical Associations and Voluntary Health Agencies. Motion by Saltzman and Irwin.

B. Upon the motion of Koenig and Henry, the Council voted to authorize expenses for Ben Saltzman and Kenneth Duzan to represent the Society at the conference.

3. The Council voted, upon the motion of Koenig and Shuffield, to authorize expenses for a representative to attend the AMA's annual conference of state mental health representatives provided the Committee on Mental Health recommends participation.

4. Raymond Irwin announced the Conference on Emergency Health Services to be held September 11 at the University of Arkansas at Little Rock and urged physician attendance.

5. A. The Society voted to reimburse the chairman of the 1971 scientific exhibits committee for the \$75 anonymous donation made by

him for exhibit awards. Motion by Saltzman and second by Koenig.

B. Upon the motion of Edwards and Saltzman, the Council voted to advise all future exhibit chairmen that the Society would provide plaques or certificates in lieu of cash awards for the outstanding scientific exhibits.

6. Upon the motion of Raney and Edwards, the Council voted to authorize a listing in the program for the 1971 convention of the American Association of Medical Assistants at an expenditure of \$25. The Council left to the discretion of the Executive Vice President whether to purchase a single listing or a joint listing with other state societies.

7. A. The Council voted to submit the following names as nominees for the chairmanship of the Arkansas State Advisory Committee to the Selective Service System, subject to approval of nominees:

L. A. Whittaker, Fort Smith

J. W. Ledbetter, Jonesboro

James T. Rhyne, Pine Bluff

In the event the nominees do not wish to have their names submitted, the Executive Committee was designated to select alternate nominees. Motion by Shuffield, second by Raney.

B. Upon the motion of Shuffield and Saltzman, the council directed that a resolution of appreciation be forwarded to Dr. Teasley in recognition of his service as chairman of the State Advisory Committee.

8. A. Upon the motion of Koenig and Edwards, the Council voted to co-sponsor with the Hospital Association a workshop on the new standards of the Joint Commission on Accreditation of Hospitals, to be held in Little Rock November 15 and 16.

B. The Council voted to pay the registration fee for Dr. Raymond Irwin as a Society delegate to the workshop.

9. Harry Hayes reported for the Insurance Committee on a study of three plans submitted to his committee: Mutual of Omaha's proposal for (1) a group disability plan; (2) an overhead expense plan, and (3) Aetna's proposal for a deferred compensation plan. Upon the motion of Koenig and Bethel, the Council voted to ask the Insurance Committee to pursue the proposals further, specifically requesting (1) assurance of Internal Revenue Service approval of Aetna's proposal and (2) negotiations with Rather, Beyer

and Harper (the present agents for the Society-endorsed disability and overhead expense plan) for rates on disability and overhead expense plans. It was the consensus that Rather, Beyer and Harper should be given an opportunity to propose a plan of equal desirability. The feeling was expressed that Society sponsorship or approval of insurance plans should be limited to one plan for each type of insurance in order to avoid diluting the value of Society endorsement.

10. John M. Tudor and Jack W. Kennedy discussed educational guidelines and certification for physician's assistants. Charles W. Silverblatt proposed a statewide meeting co-sponsored by the Society and the Arkansas Regional Medical Program for discussion on physician's assistant concept and problems involved. Upon the motion of Shuffield and Applegate, the Council voted to ask the physician members of the Health and Medical Manpower Commission to work with the Arkansas State Medical Board on developing guidelines and certification procedures for physician's assistants.

11. The Council received for information a report from Dr. Silverblatt on the progress of the Experimental Health Services Delivery System project.

12. The Council heard a proposal for minimum preventive health under the Arkansas Medicaid program by Walter J. Morrison, Ph.D., chairman of the Task Force for Health Needs of the Poor, Arkansas Comprehensive Health Planning. Upon the motion of Koenig and Duzan, the Council voted to receive the report with interest and encourage continued study and possible report back to Council at future date.

13. The Council heard reports on the AMA meeting in June by President-elect Robert Watson and delegate Purcell Smith, and commended them for their diligence.

14. The Council received for information reports on policy recommendations from the national Blue Cross Association regarding majority consumer representation on Blue Cross boards.

15. Chairman Long announced that James C. Bethel has been appointed chairman of the committee to study re-organization of the Society, as directed by the House of Delegates. John Wood and C. Lewis Hyatt were appointed to serve with Dr. Bethel on the committee. Dr. Bethel advised the Council that the committee had met and would be submitting recommendations to the Council at a future meeting.

16. During the 1971 Annual Session, the House of Delegates adopted a reference committee report calling for intensified efforts to aid the specialty societies. The recommendation of the reference committee was read to the Council and the Executive Vice President requested the advice of the Council in promoting the specialty desk service offered by the headquarters office. Dr. Shuffield noted that the arrangement had worked out very well for the Orthopaedic Society. Members of the Council were urged to recommend to their specialty societies that the groups sign up for the specialty desk service. Mr. Schaefer discussed the current status of the Arkansas Academy of General Practice administrative staff, and was authorized by the Council to negotiate with the Academy for handling of their administrative work and undertake the work in Society headquarters if satisfactory terms could be agreed upon. Motion by Saltzman and Koenig.

17. The Council voted to lower the subscription rate for the Journal of the Arkansas Medical Society to \$2.

18. Upon the motion of Bethel and Shuffield, the Council voted to approve entering negotiations with the American Medical Association and CNA for the malpractice liability program with Rather, Beyer and Harper of Little Rock as the proposed state administrator.

19. Upon the motion of Koenig and Saltzman, the Council voted to authorize the Executive Committee to take whatever action it deemed appropriate with regard to hearings on health care which may be held in Little Rock in September.

20. The Council heard a proposal from Vanguard Travel Agency for a group tour and decided to take no action on the proposal.

21. Joe Verser, secretary of the Arkansas State Medical Board, announced that William A. Snodgrass of Little Rock has resigned as a member of the Arkansas State Medical Board because of illness. Dr. Snodgrass' term on the board expires in December 1978. Elvin Shuffield and John McCollough Smith were nominated to fill the unexpired term. The Council selected Dr. Shuffield as the nominee to be proposed to the Governor.

22. Mr. Warren advised the Council that amphetamines and methamphetamines are now classed in Category II as hard narcotics, requiring written prescriptions.

APPROVED: C. C. Long, M.D.

Chairman of the Council



PERSONAL AND NEWS ITEMS

Dr. Chalfant Announces New Associate

Dr. Charles Chalfant of Booneville announces that Dr. William R. Daniel is now associated with him in his practice of medicine at 114 West Third Street in Booneville.

Laboratory Receives Award

A certificate of accreditation has been awarded the Associated Pathologists Laboratory, P.A. in El Dorado by the College of American Pathologists. The laboratory, which is under the direction of Dr. Kenneth R. Duzan and Dr. Wayne G. Elliott, received a three-year certification by the College's Commission on Inspection and Accreditation. The Inspection and Accreditation program of the College of American Pathologists is recognized as one of the most outstanding medical peer evaluation systems in the world.

Dr. Taylor At New Location

Dr. G. Wayne Taylor is now located at 211 East Matthews in Jonesboro. Prior to moving to Jonesboro, Dr. Taylor had been in practice in Leachville for ten years.

Dr. Garrison Joins Hospital Staff

Dr. James S. Garrison of Conway has joined the staff of Conway Memorial Hospital as a full-time radiologist. He was formerly on the staff of the University of Arkansas School of Medicine and will continue as an Assistant Professor of Radiology at the University Medical Center.

Dr. Baldwin Made Fellow

Dr. Deane G. Baldwin of Little Rock has been elected to Fellowship in the American Academy of Pediatrics.

Dr. Harris Moves Into New Office

Dr. Walter P. Harris has moved into a new office in the Doctors Clinic located in Van-Ark Village in Danville. The clinic is located east of the Yell County Hospital.

Physicians Have New Associate

Dr. James D. Busby has joined the staff of the Huntsville Clinic. He will be associated with Dr. Austin C. Smith and Dr. Ivan H. Box.

Dr. Jenkins Selected

Dr. Bobby J. Jenkins has been selected to be the director of the new coronary care unit in the

Jefferson Hospital in Pine Bluff. As director of the unit, Dr. Jenkins will oversee the operation of the unit, work with other doctors and train hospital personnel in the use of the unit's equipment and the techniques of dealing with heart patients in critical condition.

Physicians Join Hospital Staff

Dr. J. Shelby Duncan and Dr. Jim C. Porter, both of Benton, have been approved for membership on the medical staff of the Saline Memorial Hospital.



Mrs. Paul Gray, a past president of the Woman's Auxiliary to the Arkansas Medical Society, has written a book of poetry, entitled *PIECES OF LIVING*. The book is just off the press, with the publication date of June 30, 1971. Vantage Press, N.Y., is the publisher.

Mrs. Gray was president of the State Auxiliary in 1959-60. She is a professor at Arkansas College in Batesville. Her husband, Dr. Paul Gray, is in general practice in Batesville.



ANSWER—Electrocardiogram of the Month

Tracing shows right axis deviation; non-diagnostic Q waves in II, III, AVF, pathologic Q waves in VI, with Qs complexes V-2-4; ST segment elevation in the anterior precordial leads.

The accompanying vector cardiogram also shows rt. axis deviation, loss of anterior-septal forces, compatible with an infarction in this location. Cardiac cath revealed a 5:1 left to right shunt and pressures in the 70s for both ventricles. Possibility of mitral insufficiency in addition to ventricular septal defect was not ruled out at cath.

Subsequent surgical closure of the ventricular septal defect was accomplished with return to normal function.



NEW MEMBERS

Dr. William Thomas Shanlever

Dr. William T. Shanlever is a new member of the Craighead-Poinsett County Medical Society. Dr. Shanlever was born in Jonesboro.

He received his pre-medical education at the University of Alabama, from which he was graduated in 1961 with a B.S. degree. His M.D. degree was received in 1965 from the University of Arkansas School of Medicine. Dr. Shanlever completed his internship at the United States Naval Hospital in Charleston, South Carolina, and a residency at Baylor University Affiliated Hospitals in Houston, Texas. From 1966 to 1968, he served at the United States Naval Hospital in Guam. Dr. Shanlever's office is located at 924 South Main in Jonesboro. He is a specialist in Orthopedics.

Dr. Jim C. Porter

The Saline County Medical Society has recently added the name of Dr. Jim C. Porter to its membership roll. Dr. Porter is a native of Little Rock.

He attended Arkansas Polytechnic College in Russellville, and in 1964 was graduated from the University of Arkansas School of Medicine. Dr. Porter interned at Hillcrest Medical Center in Tulsa, Oklahoma. Following completion of his internship, he served for two years in the United States Navy.

Dr. Porter practiced for three years in Lebanon, Missouri, before moving to Benton where he is in the General Practice of medicine at 212 West Sevier.

Dr. Joseph Henry Bates

Dr. Joseph H. Bates is a new member of the Pulaski County Medical Society. He was born in Little Rock.

Dr. Bates received his pre-medical education from Hendrix College in Conway. In 1957, he was graduated from the University of Arkansas

School of Medicine. His internship was completed at the same institution and he remained there for a residency in Internal Medicine. Dr. Bates was a Fellow in Pulmonary and Infectious Diseases at the University Medical Center. He also had training as a Clinical Investigator at the Veterans Administration Hospital in Little Rock. Dr. Bates serves as an Associate Professor of Medicine at the University of Arkansas School of Medicine.

He is associated with the Veterans Administration Hospital, 300 East Roosevelt Road, Little Rock.

Dr. Raymond Vitus Biondo

Dr. Raymond V. Biondo has become an active member of the Arkansas Medical Society through the Pulaski County Medical Society. Dr. Biondo is a native of New York.

He received his B.A. degree from the University of Northern Colorado, Greeley, Colorado, in 1960. His M.D. degree was received from the University of Arkansas School of Medicine in 1967. After completing his internship at the University of Cincinnati Medical Center in Cincinnati, Ohio, Dr. Biondo returned to Arkansas where he completed a residency in Dermatology at the University of Arkansas Medical Center. He serves as a Clinical Instructor in Dermatology and Pharmacology at the Medical Center.

Dr. Biondo's office is located at 406 West 26th, North Little Rock, where he specializes in Dermatology.

Dr. William Joseph Flanigan

Dr. William J. Flanigan is a new member of the Pulaski County Medical Society. Dr. Flanigan was born in Hot Springs.

He attended the Georgia Institute of Technology in Atlanta, Georgia, and Hendrix College in Conway, Arkansas and then entered the University of Arkansas School of Medicine, from which he received a M.D. in 1955. Upon completion of his internship at Peter Bent Brigham Hospital in Boston, Massachusetts, Dr. Flanigan did residency work in Internal Medicine at the University of Arkansas Medical Center. He was a Research Fellow in Medicine at the Harvard Medical School Biophysical Laboratory in Boston from January 1959 to July 1959, and from September 1960 to September 1961. Dr. Flanigan also had training in Internal Medicine at the Peter Bent Brigham Hospital from 1959 to 1963.

From 1963 to 1967, Dr. Flanigan served as Assistant Professor of Medicine at the University of

Arkansas Medical Center. He is presently an Associate Professor of Medicine at the University.

Dr. Charles Hudson Rodgers

Dr. Charles H. Rodgers is a new member of the Pulaski County Medical Society. He is a native of East St. Louis, Missouri.

Dr. Rodgers received his B.S. degree from Arkansas A and M College at College Heights in 1961 and was graduated from the University of Arkansas School of Medicine in 1970. He completed his internship at Arkansas Baptist Medical Center in Little Rock.

Dr. Rodgers is associated with the Family Clinic at 3500 South University, Little Rock, where he is in the General Practice of medicine.

Dr. Harry Luther Rounsaville

Dr. Harry L. Rounsaville is a new member of

the Pulaski County Medical Society.

Dr. Rounsaville is a native of Shreveport, Louisiana. He received a B.S. degree from the Centenary College in Shreveport, and a M.D. degree from the Louisiana State University School of Medicine in New Orleans in 1957. He interned at the Confederate Memorial Medical Center in Shreveport. Dr. Rounsaville was in general practice from 1958 to June 1967 at which time he began a General Surgery residency at Methodist Hospital of Dallas, Dallas, Texas. In 1971, he completed a residency in Otolaryngology at the University of Tennessee Medical School in Memphis.

Dr. Rounsaville is associated with Dr. A. J. Brizzolara in the practice of Otolaryngology at 500 South University in Little Rock.



O B I T U A R Y

Dr. William Hugh Mock

Dr. William Hugh Mock of Prairie Grove died July 18, 1971, at his home in Prairie Grove.

He was born July 24, 1874, and was the son of John and Margaret Mock. Dr. Mock was graduated from Vanderbilt University Medical School in 1894 and began the practice of medicine at Prairie Grove. He continued to practice at the same location until shortly before his death.

Dr. Mock was active in numerous medical organizations and was president of the Arkansas Medical Society in 1932-33. He had also served as president of his county and district medical societies, as governor of the College of Surgeons, delegate to the American Medical Association, president of the Fifty Year Club of the Arkansas Medical Society, and a member of the Arkansas Board of Medical Examiners. He also belonged to Pioneer Physicians, the medical council of consulting surgeons for the Veterans Administration, and he was a member of the American Association of Authors and Writers.

Dr. Mock was also active in civic and communi-

ty affairs. He was chairman of the board of directors of the Farmers and Merchants Bank and was vice president of two Prairie Grove businesses. He was a charter member of the Prairie Grove Lions Club, a 32nd Degree Mason and a Shriner. Dr. Mock was very active in the Methodist Church. He served as a member of the City Council of Prairie Grove and as president of the local school board. His contributions to his community were numerous, including donation of property for a park and for public buildings. He operated a thirty-bed hospital in Prairie Grove for thirty years, assisted by his grand-nephew, Dr. Jeff Baggett.

A memorial fund in Dr. Mock's honor was established with the Prairie Grove Lions Club for the Arkansas Enterprises for the Blind.



PHYSICIANS NEEDED: Brinkley, Arkansas, modern and growing on Interstate 40, between Little Rock and Memphis, needs young General Practitioners and a surgeon. Brinkley has a servicing population of well over 8,000 with only four practicing physicians who are over-worked. It has the only hospital in the county, a modern 42-bed general hospital and a 28-bed skilled care unit. Part time clinics for specialists, i.e., surgeons, urologists, pediatricians, etc., may be considered. The citizens, the medical staff and the hospital will welcome and assist new physicians in making a start. Contact Major Bill Riddle, Administrator, Mercy Hospital, 734-4141, for information.

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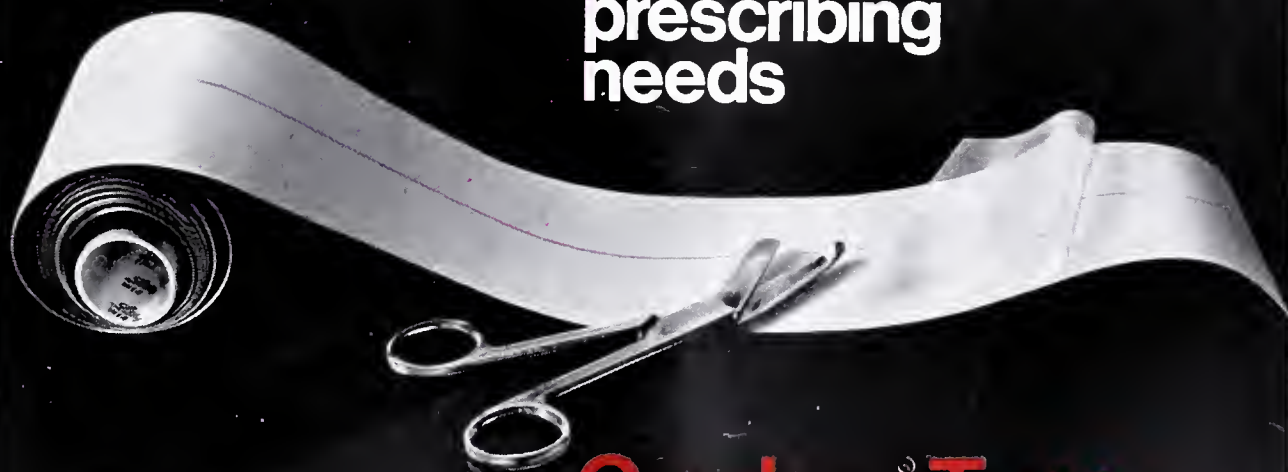
October, 1971

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 68 No. 5

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These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

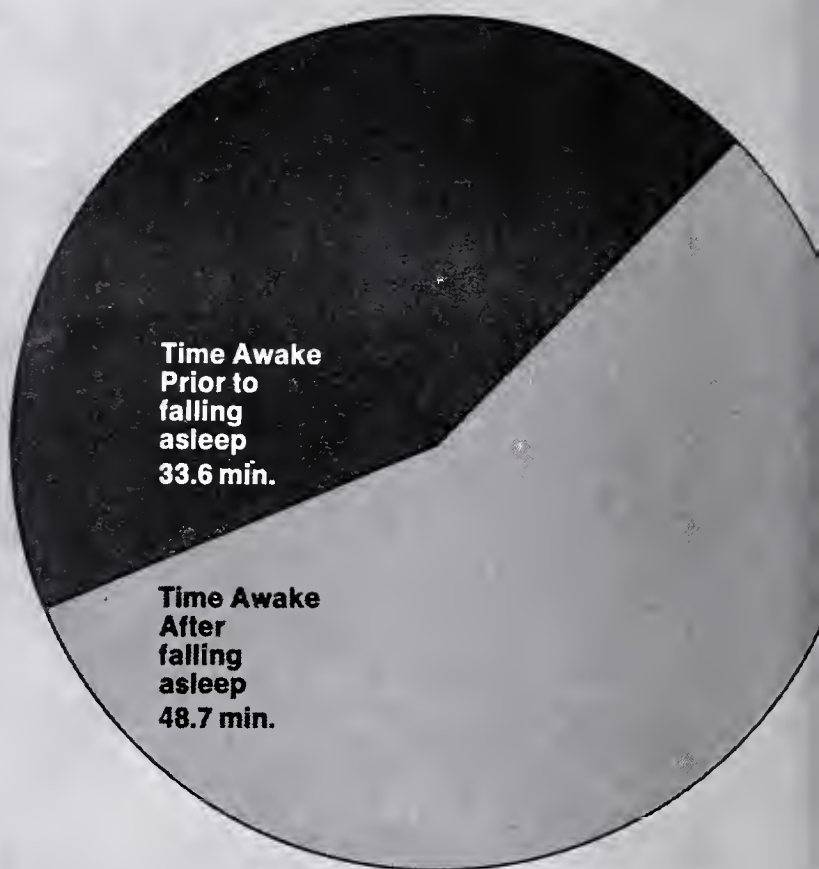
Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.

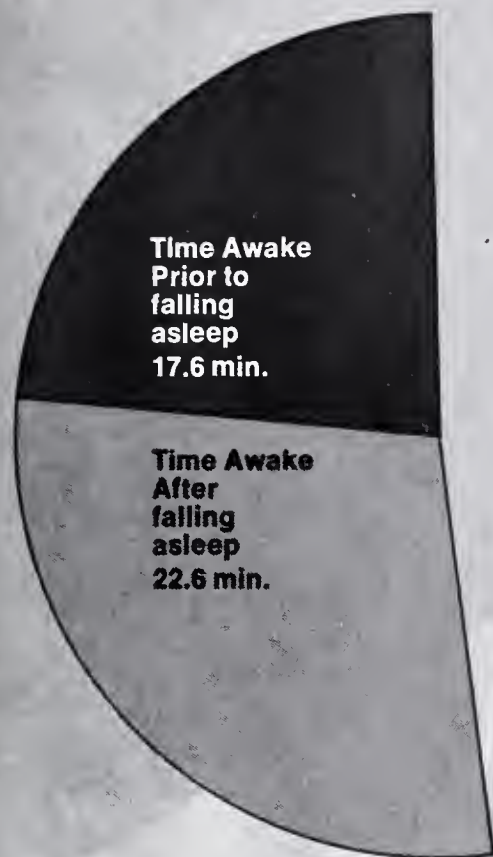
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

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Dalmane
(flurazepam HCl)



and slept through the night

On Dalmane (flurazepam HCl)



Average sleep laboratory measurements in cited studies

Parameter	Before Dalmane	On Dalmane
Time required to fall asleep	33.6 min.	17.6 min.
Wake time after onset of sleep	48.7 min.	22.6 min.
Number of wakeful periods after onset of sleep	12.2	8.4
Total sleep time	420.0 min.	447.5 min.
Total sleep percent	88.6	94.5

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(flurazepam HCl)

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

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A New Name and a New Home for a Familiar Service

William B. Stanton, M.D.*

Crippled Children's Division of the Arkansas Department of Public Welfare has been known under various names to Arkansas physicians for nearly thirty-four years as an active and extremely vital part of the health field in our state. Its origin goes back to early days of the Social Security Acts, when it was officially established, July 1, 1937, with a staff of one orthopedic surgeon and a secretary, one public health nurse and one medical social worker. Services were rendered to 422 needy children in the first year through eleven "clinics".

From this modest beginning, designed to find and treat children with those physical deformities of limbs that one associates with the expression "crippled child", the program through the years has broadened its interpretation of what constitutes a crippled child. The fact that many children are handicapped by their state of health, even though not physically crippled in the earlier sense of the term, has extended the scope of the services traditionally rendered by this agency. The first additional inclusions dealt with problems of locomotion and ambulation, such as burn scars and contractures, paralysis from spinal and head injuries and the like, requiring additional orthopedists, plastic and neuro-surgeons, but other still newer eligible conditions have been many birth deformities and childhood injuries in a continuously evolving program.

Crippled Children's Section at this time provides diagnostic and treatment facilities through seven treatment centers established throughout the state. Services included are those of specialists in both medicine and surgery, hospitalization, convalescent center care, medical social counselling, special services in physical, occupational and speech therapy, referral services for speech and hearing, mental and psychological testing, special education and vocational rehabilitation.

To support a comprehensive program such as this, the Crippled Children's Section professional staff has been progressively increased to thirty-three part-time physicians and surgeons, consulting nurses and consulting medical social service for local contacts, and it also purchases locally on a fee-for-service basis those additional medical and ancillary services which it requires on an intermittent basis.

It should be strongly emphasized that Crippled Children's Section is not intended nor is it prepared to provide for all medical needs of a given child. It does not and will not try to replace the family physician. This service seeks only to provide services of a specialist for those children who have medical or surgical conditions which would normally require the consultation and care of a specialist in a restricted field. It seeks to provide such consultation and care only to those who are financially unable to afford such attention for themselves.

The Crippled Children's program in Arkansas has been part of the Department of Public Welfare for administrative purposes and has constituted but one of several divisions in that department and as such, derived its former designation "Crippled Children's Division". In the interest of greater efficiency, it no longer constitutes a separate division but has been united with other health delivery services to form a larger entity, "Medical Services Division". In this new relationship, the old Crippled Children's Division is now known as Crippled Children's Section or CCS. By sharing the Administrative Director in common with Medical Assistance and Nursing Home Sections of Medical Services Division, it is now able to coordinate both services and funds with other state and federal programs to further enhance its value to medically and financially needy children of Arkansas.

At the time of redesignation from CCD to CCS

* 300 North Greenwood, Fort Smith, Arkansas 72901.

on January 1, 1970, medical services rendered by this agency included many new conditions evoked by concern for a "handicapped" rather than "crippled" child. The old CCD, which from its inception determined patient eligibility on financial and diagnostic criteria, has relaxed many restrictions in the area of medical eligibility in recent years to permit inclusion of numerous conditions previously considered ineligible. Crippled Children's Section has grown both in scope and in space. Twice in 1970, moves to more efficient quarters were made. It now shares modern facilities with other sections of Medical Services Division at 13th and Wolfe Streets, Little Rock, adjacent to the Baptist Hospital, where efforts continue to improve the delivery of services to those whom it serves.

Any interested person or organization may refer a child for diagnosis and recommendation of treatment to the Crippled Children's Section. Patients seeking Crippled Children's sponsorship, however, must be Arkansas residents under the age of 21 and they or their family must be unable to provide all or some part of the specialized medical or surgical needs. The patient's parent or legal guardian must apply for CCS assistance by filing an application form (CCD-21½) at the local county welfare office. If financial need is established by review of the application and if medical findings establish a diagnostically eligible condition present, Crippled Children's Section will provide the necessary supplemental assistance to meet the child's needs. To further clarify the medical eligibility, it should be pointed out that the child must be affected by a crippling condition or a condition leading to crippling or a handicap which may reasonably expect to be benefitted by treatment to the extent that the patient may be able to assume a substantially improved economic and social place in society.

With the advent of Title 19, providing medically and financially needy children with care on a non-diagnostically oriented basis, some confusion has existed in medical circles regarding the program to which a child should be referred or should apply for treatment. It needs to be emphasized that all cases qualifying diagnostically for Crippled Children's Section, even though eligible for Title 19 assistance, should be referred to Crippled Children's Section to permit

these two agencies, working together, to apply benefits of both programs insofar as possible to the individual child's needs.

Due to many ancillary services provided by CCS, beyond the present basic seven services of Title 19, much more can be done for the diagnostically eligible child on Crippled Children's Section than can be provided through Title 19 agency alone. For this reason, Title 19 funds will be used to supplement the Crippled Children's Section program for the categorically eligible recipients (AFDC) who will qualify medically for CCS.

As always, CCS seeks cooperation and support from the medical profession. It is, after all, dependent upon the physicians of Arkansas to staff its program. CCS readily acknowledges both the moral and also very real financial support it receives from the professional staff, both stipend and fee-for-service categories, in that all those who participate in the Crippled Children's program do so at some personal sacrifice, and it is hoped that the merits of this program will be so obvious as to encourage referral by all physicians of those children whom they consider eligible under the following diagnostic categories and who appear to be in financial need:

A partial list of eligible diagnostic entities for CCS services follows—

12-8-70 — Diagnoses from CCD Files

Absence of eye (acquired and congenital)
Absence of fibula, tibia (bone)
Allergic disorders
Amputees
Anteversion femoral necks
Aseptic necrosis
Asthma
Baker's cyst
Loss of eye
Blount's disease
Bowlegs
Brachial cleft cyst
Burns
Bursitis
Calcaneal foot
Cataracts (congenital)
Cavus foot
Cerebral palsy
Cerebritis
Charcot Marie tooth type hereditary
Chondrodystrophy
Chondromalacia of patella
Cleft lip and palate

Clubfoot
 Congenital fusion vertebral bodies
 Congenital heart diseases
 Coxa Magna and coxa vara
 Craniostenosis
 Cystic fibrosis
 Cystic hygroma
 Diabetes
 Dislocated hip
 Disorder of musculoskeletal system
 Disorder of occlusion
 Dysplasia hip
 Effusion knee
 Encephalitis (not acute stage, but after effects)
 Epilepsy
 Epiphysitis, juvenile
 Erbs palsy
 Flatfeet
 Forefoot adduction, valgus and varus
 Fractures, late effects
 Ganglion cyst
 Genu valgum and genu varus
 Genu recurvatum
 Gonoccal arthritis
 Guillain Barre Syndrome
 Hallux valgus
 Hearing losses
 Hemangioma
 Hernia
 Hydrocephalus
 Hydronephrosis
 Hypospadias
 Imperforate anus
 Injuries, late effects
 Internal derangement knee
 Klumpke paralysis
 Kyphosis
 Legg Calve Perthes
 Leg Length Discrepancy
 Lumbar lordosis
 Malignant neoplasms (central nervous system and bone
 only if operable)
 Marfan's disease
 Marquio's disease
 Meatal stenosis
 Meningomyelocele
 Mental retardation (not for single diagnosis)
 Metatarsus varus
 Microcephaly (not for single diagnosis)
 Milroy's disease
 Mole
 Mongoloid (not for single diagnosis)
 Multiple sclerosis
 Myositis ossificans
 Nevus
 Osgood Schlatter's disease
 Osteochondritis dissecans
 Osteochondroma — osteochondrosis
 Osteogenesis imperfecta
 Osteomyelitis
 Pigeon toe
 Planovalgus
 Plantar wart

Polio
 Port wine
 Ptosis
 Pyloric stenosis
 Rheumatic fever
 Rheumatoid arthritis
 Rickets
 Scheuremann's disease
 Scoliosis
 Septic arthritis
 Slipped capital femoral epiphysis
 Speech defect (only with cleft palate)
 Spina bifida
 Spinal cord tumor (if operable)
 Spinal meningitis
 Spondylolisthesis
 Strabismus
 S-shaped foot
 Subluxating patella
 Supernumerary digits
 Syndactylism
 Synostosis tarsals
 Synovitis
 Talipes equinovarus
 Tarsal coalition
 Thyroglossal cyst
 Tibial torsion
 Tight heelcord
 Torn meniscus
 Torticollis
 Tracheo-esophageal fistula
 Tuberculosis of bone
 Undescended testicle
 Vertical talus

The following diagnoses require approval of Medical Director, not to be accepted before such approval is obtained: Allergic disorders—Asthma—Blindness—Clactoremia — Metabolic and nutritional disorders — Microcephalus — Mongoloid—Other endocrine disorders—Phenylketonuria—Sickle cell.



Treatment of Polyneuropathy With Azathioprine

G. M. Yuill, W. R. Swinburn, and L. A. Liversedge (Royal Infirmary, Manchester, England)
Lancet 2:854-856 (Oct 24) 1970

Five patients with acute polyneuropathy and one with chronic polyneuropathy, all refractory to treatment with adrenal steroids or corticotropin, were treated with azathioprine. The five acute cases responded very well to treatment.

Workshop Pilot Study in a Maximum Security Psychiatric Setting*

Phillip V. Livingston, M.A., A. F. Rosendale, M.D.**

Introduction

In concluding a five year Hospital Improvement Project (HIP) Grant, the Arkansas State Hospital maximum security unit, known as Rogers Hall, found itself faced with a problem. It was the consensus of the staff and of the hospital administration that the grant had been successful in accomplishing its goals. More than 275 patients had gone through the program and all of the criteria of an effective treatment program had been met. Also, the secondary goals of improving attitudes toward the mentally ill offender had met with at least moderate success. The problem encountered was that a small group of our patients had gone through the five year period, and had not responded to any of the treatment efforts put forth. This group was known by a variety of names, ranging from "Residual Group" to "Base Group," and, by all standards, these patients qualified as treatment failures.

This group of patients consisted of five chronic schizophrenics and four mental defectives. All of these patients had been in the hospital for a number of years. Their ward behavior included stereotyped and manneristic pacing, communicating through the use of word salad, openly hallucinating, and near complete withdrawal for the schizophrenics. The mental defectives presented fewer overt symptoms, although behavior problems such as homosexuality, cursing and yelling, and occasional fighting were not uncommon.

Objectives

The idea of setting up some type of work program for these patients had been informally discussed at intervals for a year or so; however, it was finally through a joint effort on the part of the hospital administration and the Rogers Hall staff that an Extended Employment Workshop came into being.

Our plan was to take our residual group of patients and start a pilot project which would provide the patients some meaningful yet simple task that could be performed in exchange for a

limited amount of money. We were interested in observing first-hand what the results of such a project might be. While quality and quantity of the output was one consideration, that was not our major concern. More importantly, we wanted to observe the patients' performance and any behavioral changes that might occur. We felt that if our patients could become productive it might open the door for larger numbers of chronic institutionalized patients to participate in this or similar programs. There was also the possibility that even though these patients had been "written off," at least in terms of being candidates to leave the hospital, enough behavioral improvements might occur to increase their chances of functioning in a sheltered living setting outside of the hospital.

The hospital administration suggested an ideally suited task, that of refinishing some two hundred wooden dining room chairs. These chairs had been taken out of service and were stored at the Benton Unit of the Arkansas State Hospital. Through cooperation with the Benton Unit, the administration made arrangements to pay a maximum of \$1.00 for each chair finished.

Method

As we now had the task, our next goal was to develop a means of motivating and rewarding the workers. With a leaning toward Behavior Modification and conditioning techniques, as we had effectively utilized this approach in the past, we felt that this provided our best bet. Simply stated, the idea in operant conditioning is to set up a situation where it is likely that the patient will make the correct response—in this case, sanding chairs—and to reward him immediately upon his performing the behavior. This should increase the frequency of such behavior. We decided to use pennies and to reinforce the patients on a variable schedule, with the average time for the pay-off being every 7½ minutes. The patients worked for a total of three hours per day, five days a week, and on the above schedule, could earn a maximum of 24 cents per day.

In an attempt to insure that the pennies served as reinforcers, we provided a small canteen where the patient could purchase cigarettes for 2¢, cola

*The authors wish to thank Dr. George W. Jackson, Director Mental Hospitals, Mr. A. C. Yopp, Director of Administration, Arkansas State Hospital, Little Rock, Arkansas, and Mr. Willis Ricketts, Administrator, Benton Unit, Arkansas State Hospital, for their assistance and cooperation in making the workshop possible.

** Affiliated with Arkansas State Hospital, Little Rock.

for 3¢, coffee for 2¢, and gum or candy for 1¢. Much to our satisfaction we found that the patients were eager to earn the money in order to buy the above items. We loaded the dice slightly in our favor by limiting the free coffee and tobacco which they received on the ward, and they were not allowed to bring the hospital-furnished tobacco, which they had to roll into cigarettes, to the workshop. In the event that a patient did not want the rewards mentioned, we constructed a "Prize Board" which had a number of items mounted on it, with the price clearly visible. These were items such as billfolds, ID bracelets, transistor radios, etc., which ranged in price from 39¢ to \$4.00. So far, we have found that this is not particularly appealing to our patients, since they choose to buy those items that can be consumed immediately. Our exceptions to this behavior have been of two mental defectives, who appear more interested in saving their money and who to date have purchased very little.

After a few weeks of successful work with our patients we felt that we could enlarge the group and possibly obtain a broader sampling. We proceeded to contact the Arkansas Rehabilitation Center located on the grounds of the Benton Unit, Arkansas State Hospital, and found the staff there to be quite willing to cooperate with our plan. We agreed to take clients who had failed to qualify for one of their programs, and started a schedule of working with six of their clients. These clients were transported to and from Rogers Hall each day. In order to work with as many clients as possible, the group was rotated each week, and a total of four groups actually worked on the project. This gave us a total of fifteen workers each day.

Our experience with these clients differed in no significant way from that with our own patients. In terms of background, diagnosis, years of hospitalization, they were quite similar. As a result the discussion of the project is applicable to the entire group.

We did not attempt to run the workshop along the lines of a well-controlled scientific study. This was not feasible in our setting, and it furthermore appeared likely to us that the records and observations which we were keeping would provide ample evidence of whether or not we were being successful in terms of our goals as outlined.

Results

As of this date, approximately thirty chairs have been completely refinished at a patient labor cost of approximately \$30.00. A relatively small amount of this work was performed by our Occupational Therapy shop, which received no monetary reimbursement. The primary goal of our workshop group was to remove the old finish from the chairs and to complete the sanding to a point where all that remained to be done was the applying of the new finish. We feel that we have several workers who could now do the finish work, and several others who could be trained to do this work. It must be kept in mind that when we started the group on this project, a number of people, including some of our staff, had rather serious doubts as to whether or not they would be able to do even a limited amount of the rough sanding. In view of the results, however, it becomes apparent that if one were interested only in the economic factors involved, a workshop of this type would be worthwhile.

Some of the more significant findings were as follows: (1) There was a marked decrease in the amount of psychotic or otherwise inappropriate behavior while working on the project and some carry-over to general ward behavior. (2) The patients as a group offered very little resistance to working on the project, and some expressed a desire to work longer and earn more money. This is in marked contrast to their earlier behavior, where for practical purposes they were participating in no activities, and resisted even the slightest amount of work such as helping clean the ward. (3) The quality and quantity of their work generally showed continual improvement, although several patients' performances seemed to reach a plateau after a few weeks.

Summary

In summary, what we did was to work with a group of chronic psychotic and mentally retarded patients who had failed to respond to intensive treatment efforts over a five-year period, and who in this respect represented treatment failures. Through the use of conditioning techniques it was found possible to motivate these patients to perform a simple task of sanding chairs. Not only has the project proven economically sound, but more importantly, it has resulted in behavioral improvement in our patients. It also opens the door for more extensive work in this area.

Cerebral Dysintegration

Stevenson Flanigan, M.D.,* Sidney Berman, M.D.,**
and William J. German, M.D.**

This report concerns correlations between neurological functions and certain psychological disturbances consequent to lesions of the central nervous system. The information has been gathered from the examination and treatment of 65 neurosurgical patients. The term "cerebral disintegration" indicates difficulty of integration at the cerebral level. Integration is used in its psychological sense to describe the coordination and relation of the total process of perception, interpretation and reaction leading to effective behavior. It involves two major areas of brain function, the organization of the body image and the perception and spatial organization of the extrapersonal environment. Since this includes man's relations with his total environment, it is necessary to limit the psychological studies to a few tests which have been used for similar purposes previously. These utilized the principles of gestalt psychology which Lauretta Bender especially defined and expanded in her monograph, "A Visual Motor Gestalt Test and Its Clinical Use".¹ In addition, the Goodenough human figure drawing test² was employed in the version developed by Machover in the Draw-A-Person Test.³ The validity of correlation between the individual's concept of body image and the figure drawing was substantiated in a previous work by one of the present authors (S.B.).⁴

The results were classified according to the degree of deficit in completion of the expected graphic responses: major for 37 patients, minor for 21 patients and no defect for 7 patients. The patient's performance with the Bender was measured on his ability to perceive and integrate the test configuration. This involved integration in the dimensions of both space and time. The grading depended upon several variables: Relative size, axis orientation, boundary delineation, contiguity of figure parts, perseveration of graphic performance, and overall pattern reproduction. The Draw-A-Person Test was graded on synthesis and omissions in the figure drawing.

These grades were correlated with the specific neurological lesions: 20 were considered to be diffuse and 45 localized. The diffuse lesions included trauma in 9 patients, seizure states in 4, and 7 various other problems. Of the localized lesions there were 32 neoplasms, 7 other space-occupying masses, and 6 patients had localized lesions of other types (Table 1.). These patients were not sequential hospital admissions but were selected according to special interest.

Head and Holmes introduced the concept of body schema in 1911.⁵ In their classical study of the cortical sensory disturbances, they tested the recognition of posture, passive movement, two point spatial discrimination (with compasses), localization of stimuli, differences in weights, different textures, size and shape of objects, and

TABLE 1.

LESION	DISINTEGRATION		
	Major	Minor	None
DIFFUSE			
Trauma			
Contusion	5	1	
Fat Embolism	1		
Subdural Hematoma	1	1	
Seizure State	2	2	
Basilar Insufficiency	2	1	
Chronic Alcoholism		1	
Parkinsonism		1	
Dystonia	1		
Aqueductal Stenosis	1		
Sub-total	13	7	
			Total 20
LOCALIZED			
Glioblastoma	9	3	2
Meningioma	4	3	
Metastasis	3	1	
Craniopharyngioma	1		2
Oligodendroma		1	
Astrocytoma		1	
Ependymoma, Lateral, Ventricle	1		
Periaqueductal Lymphoma		1	
Hematoma	3	1	
Abscess	2		1
Carotid Insufficiency	1	1	
Cerebellar Angioma		1	
Lateral Medullary Syndrome		1	
Transverse Myelitis			1
Lumbar Lypomeningocele			1
Sub-total	24	14	7
			Total 45

*Division of Neurosurgery, University of Arkansas Medical Center, Little Rock, Arkansas.

**Departments of Neurosurgery and Psychiatry, Yale University School of Medicine, Yale-New Haven Medical Center, New Haven, Connecticut.

the recognition of tactile differences. They concluded that the quality of cortical activity and the functional integrity of the cortex pertains to three major characteristics: 1) discrimination, the ability to recognize and appreciate the similarities and differences between sensory experiences; 2) attention, the ability to focus on the changes evoked by sensory impulses; and 3) memory, the registration, storage and recall of past impressions. The images thus formed may be at the level of conscious, but more often, as in spatial impressions, they remain outside consciousness. "Here they form organized models of ourselves which may be termed schemata".⁶ The final products of the tests for appreciating posture, passive movement, tactile localization, etc. become, "... combined standards against which all such changes of posture (or sensory localization) are measured".⁷ The schemata are constantly changing. "We are always building up a postural model of ourselves." Destruction of such schemata by a lesion of the cortex renders impossible recognition of posture or the locality of a stimulated part in the affected part of the body.

In subsequent studies Schilder⁸ expanded these concepts to include the total personality in the formation of higher levels of appreciation of the body. This he characterized as the "body image"; a synthesis derived from all the sensory modalities, the knowledge of the position of the body

and the body parts in space, and a perception of the unity of the body. The latter concept includes emotional and sociological factors and a projection of the body into the space around it and into time.

Another important line of development in the understanding of the body image concepts came with the work of Anton⁹ who first pointed out the phenomenon of non-perception of one's own neurological defects. He showed the connection of this phenomenon with localized brain lesions. Anosognosia (i.e. agnosia for disease) was a term coined by Babinski in 1918¹⁰ to describe the lack of awareness of and indifference to the paralyzed limbs in hemiplegic patients.

The composite illustrated in Fig. 1. represents all 9 of the Bender test cards which were presented individually in that test. The Draw-A-Person Test result in Fig. 2. is an example of a response which was interpreted as showing a normal synthesis of the body figure with only a minor deficit of omission (facial features and distal parts of the lower extremities) in a patient without an organic brain syndrome. She did have anesthesia of the distal parts of the lower extremities as a life-long residuum of a lumbar lipomeningocele. There was also a reduction of motor functions relating to the L-5 and S-1 roots. These omissions were interpreted as a psychological denial mechanism.

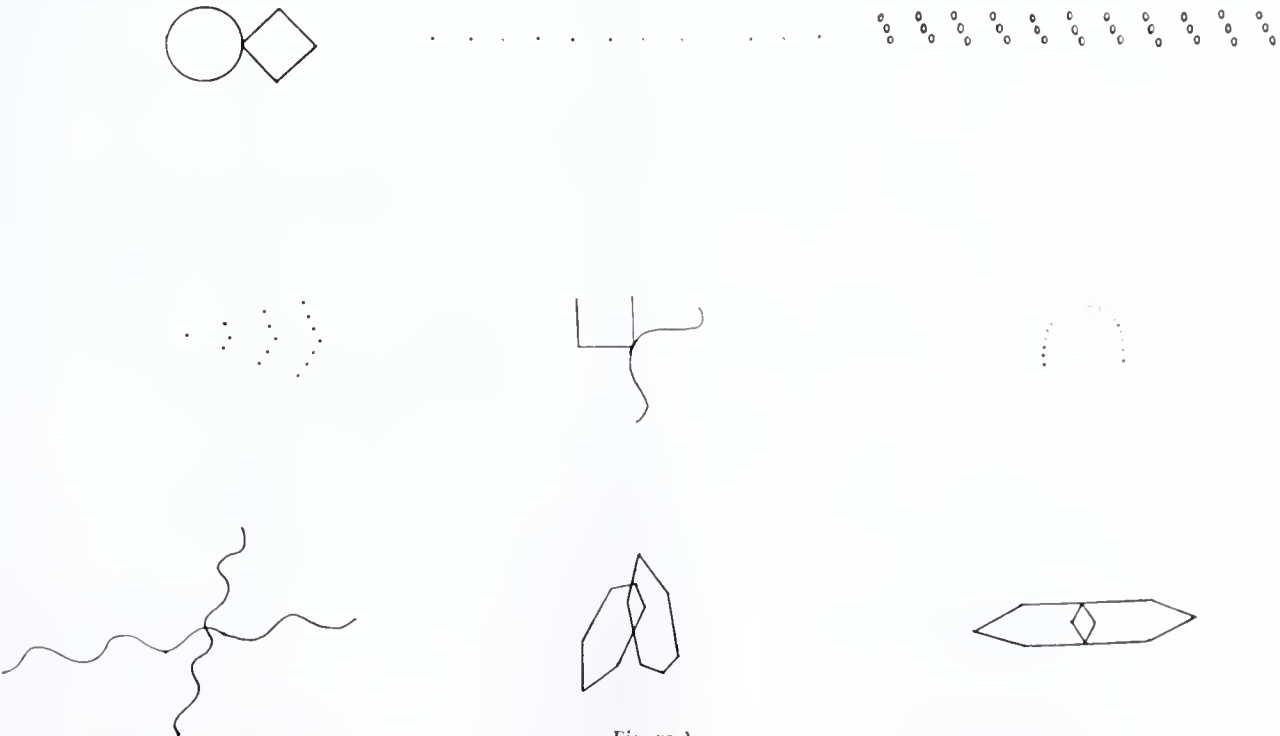


Figure 1.

A composite of the 9 cards used in the Bender Visual Motor Test.

Fig. 3 illustrates the influence of brain damage on the figure drawings. The left figure is superficially well synthesized except for the enlarged and distorted hands which were interpreted as manifestations of aggression and hostility. This

drawing was done by a paranoid schizophrenic patient whose brain was not thought damaged otherwise. By comparison the other figure, also done by a paranoid schizophrenic patient, is exploded and lacks synthesis. This drawing was



Figure 2.

A relatively normal response to the Draw-A-Person Test by an adult not suffering from brain injury. See text.

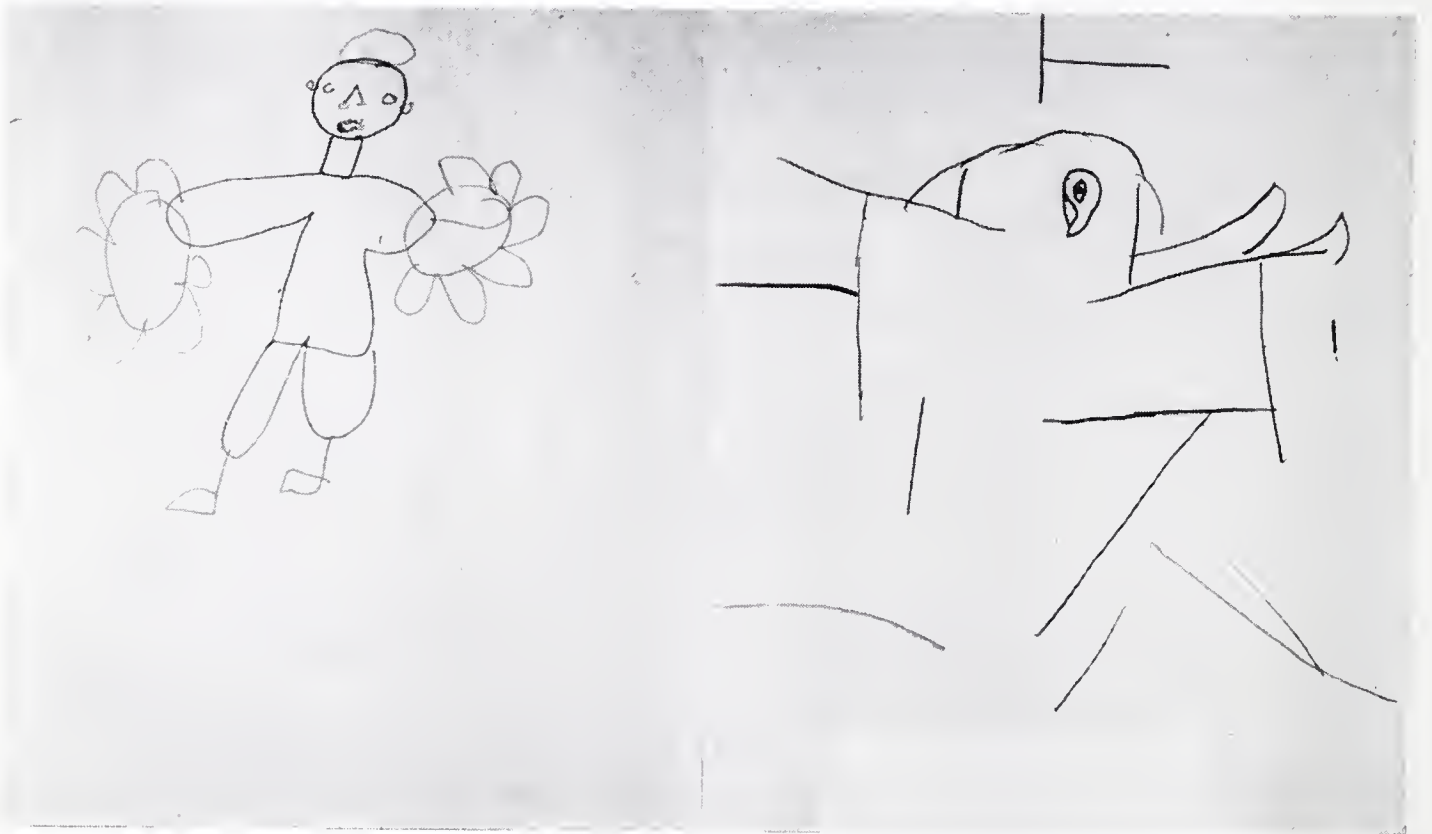


Figure 3.

The responses to the Draw-A-Person Test by two patients with diagnoses of paranoid schizophrenia. The figure on the left was done by an individual suffering from psychosis without evidence of organic brain damage. That on the right was done by a brain-damaged schizophrenic. See text.

performed by an individual in whom cerebral atrophy had been demonstrated. The patient showed neurological abnormalities as well as a convulsive disorder. Characteristically the patient was unable to differentiate the figure from the background (a body boundary distinction deficit), and the concept of body image appears almost totally destroyed.

The shaded line drawing of the top of the head (Fig. 4) depicts the sites of most of the localized lesions tabulated in this report. Attention is directed to the density of localization in and adjacent to the midline. In the second part of the figure only those localized lesions in patients with major disintegration in their performance are shaded. Again the posterior interhemispherical and parietal lesions stand out.

Disturbances in cerebral integration (disintegration) were identified in all patients whose lesions were classified as diffuse (20 patients). The deficit in performance was major in 13 of these individuals and minor in 7. Patients with localized lesions (45 patients) fared somewhat better with only 24 showing major defects in their performances and 14 with minor integrational deficits. There were 7 whose performances were interpreted as normal. Seventeen of the 24 patients demonstrating major disintegration and harboring localized lesions were also recorded as showing evidence of increased intracranial pressure.

Among the diffuse group, acute trauma led

the field with 67 per cent major disintegration. Fig. 5 and Fig. 5a provide illustrations of the defects in performance as they were interpreted in one of these cases. Of the localized lesions there were 32 neoplasms. The most frequent type was glioblastoma, of which there were 14. Of these 14 individuals 64 per cent showed major disintegration, and all but two had evidence of increased intracranial pressure. Fig. 6 illustrates the performance of a patient suffering a glioblastoma in the posterior frontal area of the right cerebral hemisphere. Similar major integrational defects were found in 3 of 4 patients with metastatic tumors, 5 of 7 with intracerebral abscesses and hematomas, and 4 of 7 with meningiomas. Fig. 7 demonstrates the Draw-A-Person Test performed by a patient with a metastasis from a lung carcinoma in the right parieto-occipital area. The Fig. 8 is the Bender performance of a patient with a left frontal meningioma.

Disintegration in test performance was related to the site of 39 mass lesions as follows: Of the interhemispherical masses there were major deficits in the studies performed by 12 patients, minor deficits seen with the performance by 3 patients, and no deficits in the performance by 2 others. The latter two individuals harbored small suprasellar craniopharyngiomas. The third craniopharyngioma which was larger and extended into the third ventricle and septal area produced major disintegration test results.¹¹ The

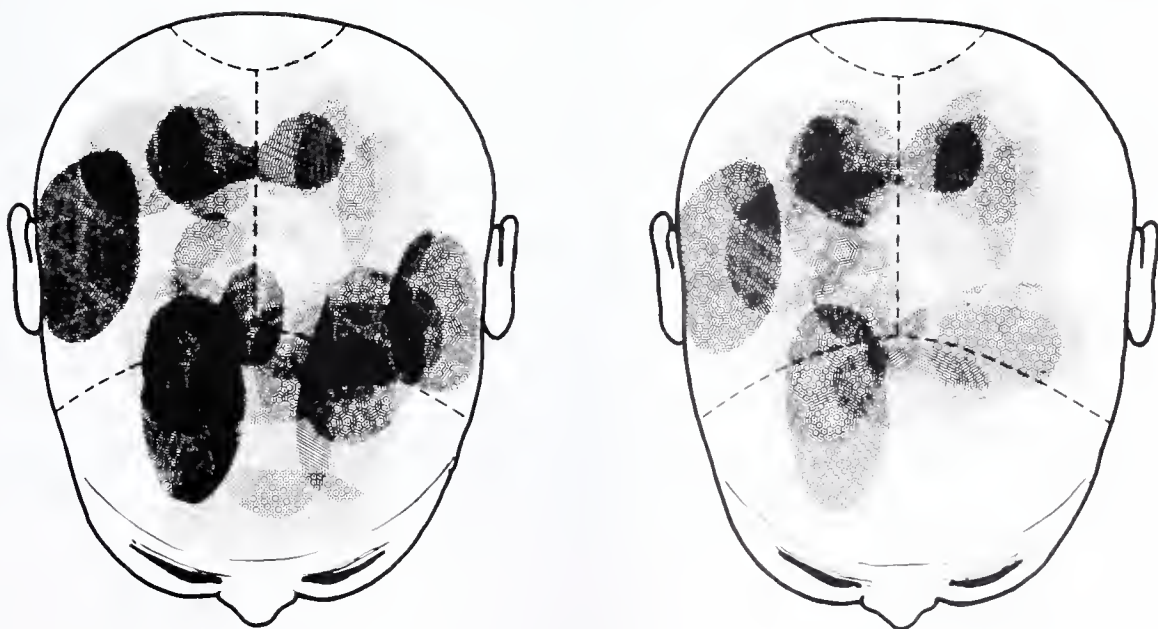


Figure 4.

The drawing to the left indicates the site for most of the localized lesions tabulated in the material for this report. The shaded drawing to the right depicts only those localized lesions with which there was in the tests an associated integrational deficit of a major sort. The density of the shading in the two drawings correlates with the frequency of involvement.

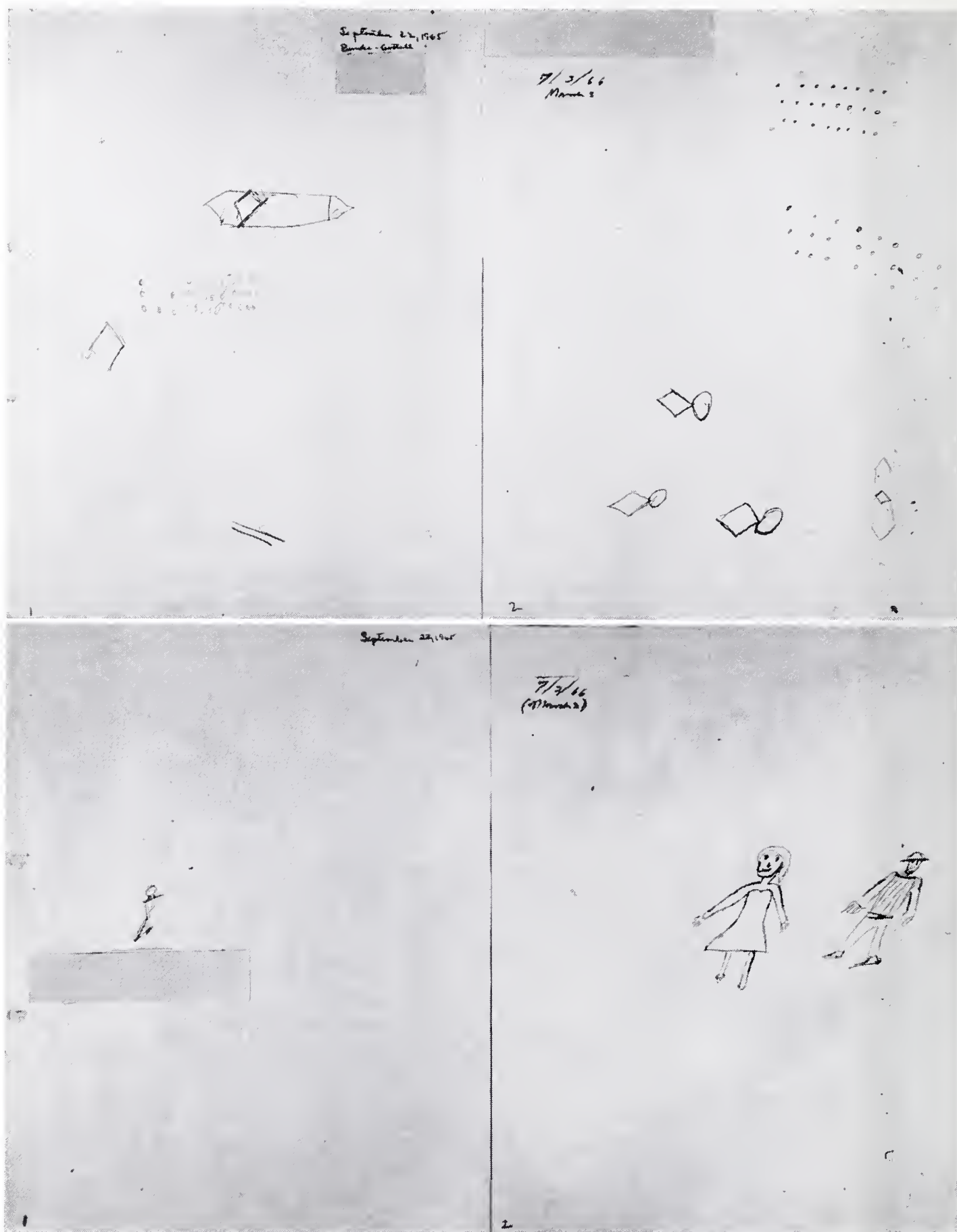


Figure 5.

These are the partial Bender and figure drawing performances of a 28-year-old man who suffered cerebral concussion, a fractured femur, and secondary fat embolisation. On the left there is evidence of defective reproduction of size relations and patterns with perseveration and loss of axis deviation in his performance of three of the Bender cards. The figure drawing below (left) was contracted with omissions of arms and facial features and a moderate distortion in the relations of body parts. These were dated September 22 and were done the day following his admission.

On the right are the recovery studies done 10 months later. There are defects still demonstrable in these performances, and the patient was still described as convalescent with an altered personality and a continuing complaint of diplopia. The defects are relatively minor in these tests.

9 frontal masses were associated with major disintegration in 3 instances, minor changes in 5, and none in 1. Those 3 individuals with frontal lobe lesions and major disintegration had increased intracranial pressure. There were also 3 of the 5 with minor disintegration of function who had evidence of increased intracranial pressure; it was absent in the individual who was thought to perform normally. The 5 purely parietal lesions *all* produced major defects, and the Fig. 9 shows the lateralization defect encountered with some of the parietal lobe lesions as emphasized by Critchley.^{12, 13} All of these

patients had signs of increased intracranial pressure. The 6 temporal masses had major deficits of performance in 2, minor in 3, and no deficit in 1. The lone occipital abscess caused only a minor defect when tested in the convalescent period. It is notable that 77 per cent of these major integrational defects were caused by inter-hemispherical or parietal masses.

Increased intracranial pressure was present in 30 patients and 20 of these had major difficulties in their tests. This was about the same incidence of major deficits found in patients with diffuse lesions (13 of 20). Similarly of the 29 patients who exhibited disturbances of memory and orientation, 22 had major difficulties with the tests. Another correlation in the mental sphere related to limited awareness of some patients of



Figure 5A.

Test performances by the same individual as in Figure 5 performed six days after injury. In the Bender tests there were further losses in the reproduction of the patterns and relations within the patterns, and perseveration was more evident. The figure drawing below shows a greater disorganization of body parts relationships with major omissions and a considerable amount of perseveration. These studies were done at a time when the patient was quite disoriented and demonstrated bilateral Babinski signs.



Figure 6.

On the left are the figure and Bender responses of a 55-year-old female done pre-operatively. She was harboring a glioblastoma of the right posterior frontal area and was showing evidence of increased intracranial pressure. There was a left sided paresis and parietal lobe neurologic deficit. Elements of confusion and right-left disorientation were also present. In the figure drawing there is a major disintegration and distortion of the body and body parts. The trunk is lost in the tendency for the extremities to radiate from the head, and the omission of the trunk is exaggerated with an extension of the bottom line down between the legs (a body boundary deficit).

The response to the Bender cards shows a marked loss in contiguity in the reproductions of cards A, 7, and 8, and considerable difficulty with pattern reproduction for cards 2 through 6 as well as in the others. Axis direction and deviation presented a major problem.

The two figures on the right were performed one month following the operative procedure and there is still major disorganization, dyssymmetry and immaturity of the body form and relations of the body parts.

their illness or the difficulty that it imposed on their performance. The work by Weinstein and Kahn¹⁴ supported and expanded the impressions that Babinski had offered in this regard and to which reference has been previously made. At least half of the 36 patients who demonstrated major disintegration in their tests had some measure of denial of the detectable neurological deficit, while only 4 of the 29 with minor or no test defects showed denial tendencies.

The highest correlation of neurological and integrational dysfunction was found in those patients who had praxic disturbance in performing acts which required crossing the mid-line and involved right-left orientation. Thirteen of 14 of these had major defects in their tests of integration. The lone exception was a commercial artist who showed what was interpreted as a minor deficit; perhaps his ingrained graphic skills resisted disruption.

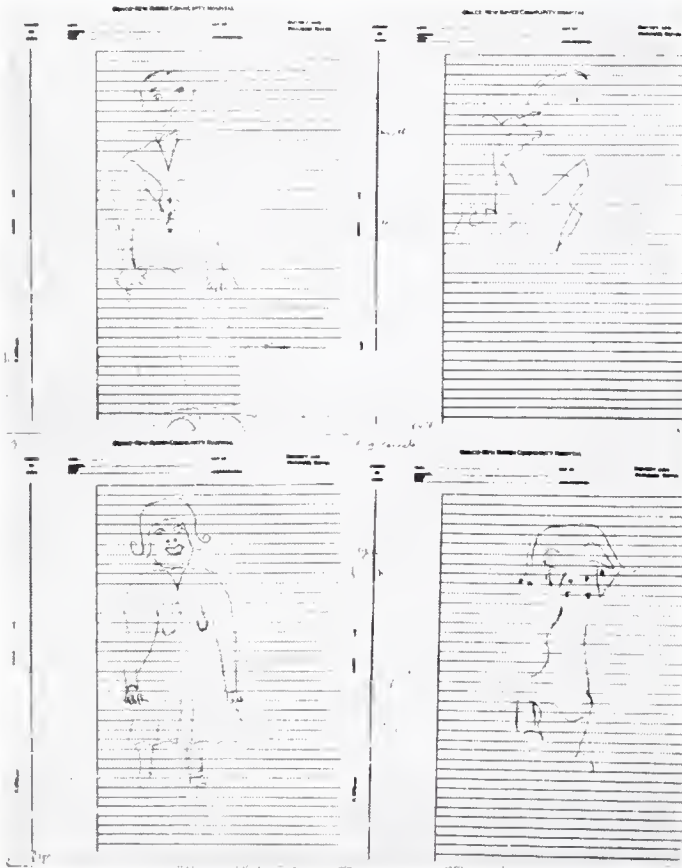


Figure 7.

This 54-year-old man had a right parietal-occipital metastasis from a carcinoma of the lung. The figure drawings on the left were performed in the pre-operative period while he was suffering a left hemiparesis and left parietal lobe function deficit and a left homonymous hemianopsia. There was evidence of increased intracranial pressure and he was disoriented. These drawings show a minor lateralization of the body image defect in the figure's right forearm and wrist in that they are contracted and shortened in comparison with the opposite member. This defect corresponds to the mirror image of the patient's affected left side and is a graphic response in his left extrapersonal environment (commensurate with a right cerebral lesion). The post-operative study (the drawings on the right) done after one week of convalescence show a striking disintegration of both male and female figures with loss of body boundaries (confusion of figure and background), omissions of body parts, and perseveration.

Correlation of various types of dysphasia with the results of the tests indicated that of the 24 patients with expressive speech deficits, 17 had major test performance difficulty. Among the total group of 36 who demonstrated major disintegration, half had associated speech problems. A few patients had to be excluded from the test because of their limited abilities to communicate. However, since the tests are non-verbal aphasic patients were able to perform it. Paralysis involving the dominant upper extremity imposed an additional factor upon the test situation, but neither the laterality of the lesion nor the resultant motor disability appeared as strong determinates towards major integrational deficits. Of the 20 patients who had motor deficits and

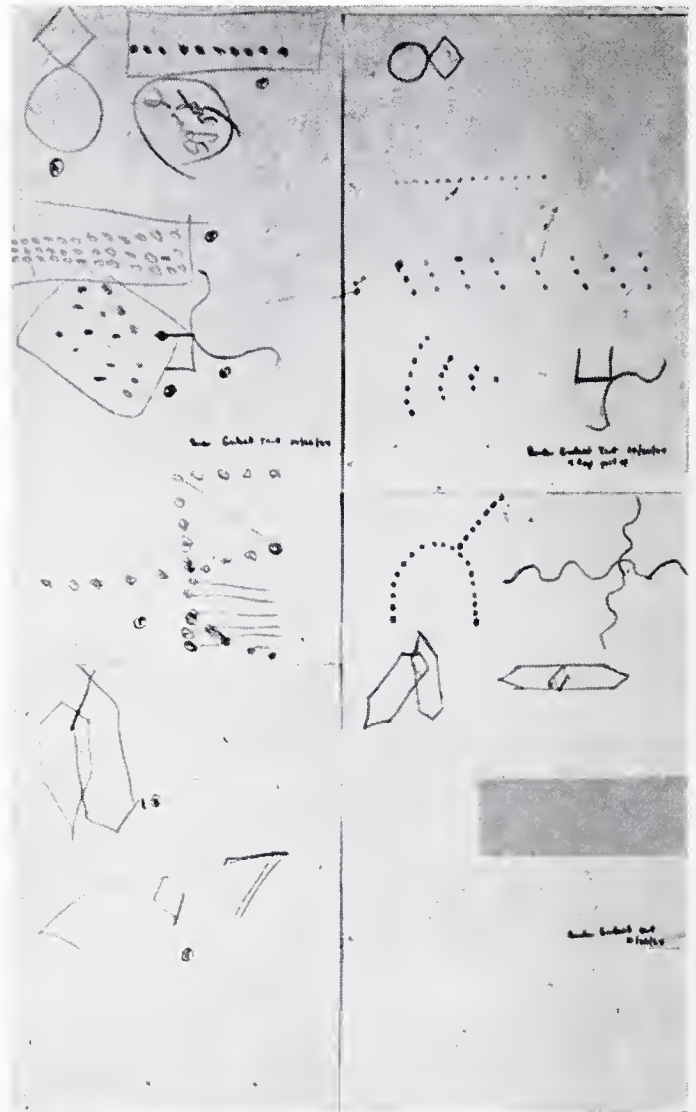


Figure 8.

Bender test studies by a 52-year-old female with a right hemiparesis and a mild expressive dysphasia associated with a left frontal meningioma. There was confusion and evidence of increased intracranial pressure of a considerable degree. The performance in the immediate preoperative period is illustrated on the left. It shows enlargement of the figures, axis and angle deviations, regression from points to circles and lines, pattern changes and the use of boundary and supportive devices. Marked improvement is seen in the illustrations to the right which were performed on the fourth post-operative day. These can be interpreted as normal.

major defects in the tests, the lesions were in the right hemisphere in 12 and in the left in 8.

Evidence of parietal lobe dysfunction occurred in 32 patients. Seventy-eight per cent of these patients had major difficulty in performing the integration tests and the other 7 had minor difficulty. The lesion involved the right parietal lobe in 16 of the 32, again suggesting that the specific cerebral functions upon which the tests depend are not strongly lateralized. The importance of the parietal region is again emphasized. The presence of visual field defects appeared to have little influence on the test results. Even in the 8 patients who demonstrated lateralization in disturbance of figure drawing as many had visual field defects as did not. These were homonymous visual field defects which were evident with single stimulus objects. It is noteworthy that lesions which did not involve the parietal or inter-hemispherical regions had little effect on test performances.

The assessment of integrational abilities in



Figure 9.

Reproduction of the Bender A card in the two left figures were done immediately following and three months following the operative removal of a glioblastoma from the right parietal area. The patient was a 48-year-old, right-handed female with a left hemiparesis, parietal deficit and homonymous hemianopsia. The figures on the right represent attempts in response to the Draw-A-Person Test performed in the same sequence. The upper right drawing demonstrates the disorganization she was experiencing with reference to the left extrapersonal spatial field, manifested as a contraction and distortion of the right extremities of the figure. Notice the displacement of the body parts into the body. The facial features on that side of the figure are partially omitted, again corresponding to the mirror image of the neurologic deficit, consistent with a right cerebral lesion. The late post-operative performance in the Gestalt Test and the figure drawing test show marked regression and deterioration in performance.

this group of patients is based on their performance of manual-graphic responses to visual and verbal requests. Quality control of responses was continuously available to the subjects through their visual mechanisms. A notable exception to this control was evidenced in one patient, the Bender and figure performances from whom are illustrated in Fig. 10. This illustration also points out the concept that integration is more than a simple reflex arc, i.e., more than the simple continuum from a visual perception to a resultant manual performance. The input stimuli were dependent upon the patient's afferent communication abilities, especially verbal and visual. The output was dependent upon the capacity to produce a motor response. But, he had lost the coordination (integration) of the two. Thus the circuitry begins in the extrapersonal world (outside the computer), becomes integrated in the brain (analog-digital), and exerts an effect upon the environment (output, control or read-out). This is not to suggest that the brain operates upon principles similar to those of a computer, but merely to introduce an alternate mode of viewing the problem.

In conclusion and in support of Schilder's concepts, this evidence suggests a strong dependence of integration upon the integrity of the structures between the hemispheres. Otherwise there is little to support a localization of this function of integration. In the psychological sense defects in the concept of body image and the appreciation of spatial relationships seem most likely a result of a generalization of the organic disorder, even with hemispherical lesions. The relative participation of the dominant or the non-dominant parietal lobe in the performance of these tests is open to question, and there is no evidence in this study for localization to either side.

This work does not deny that parietal association areas serve a major function in the organization of response to these measuring tests. The 5 patients with lesions localized purely to the parietal lobe all had major difficulty in test performance, but they also had evidence of increased intracranial pressure. The few cases of parietal involvement not showing generalized organic derangement did nevertheless evidence some breakdown in integration. The figure of 77 per cent major integrational defects associated

with interhemispherical and parietal masses suggests a trend, but there is no absolute information to implicate the parietal lobe alone as the basis of this capacity of integration. The association of integrational deficit and a loss in praxic right-left orientation also lacks specific correlation with a localized effect. Again there is a suggestion of the importance of interhemispherical relations. This reflects the importance of the individual's body image concept in the performance of these tests of integration.

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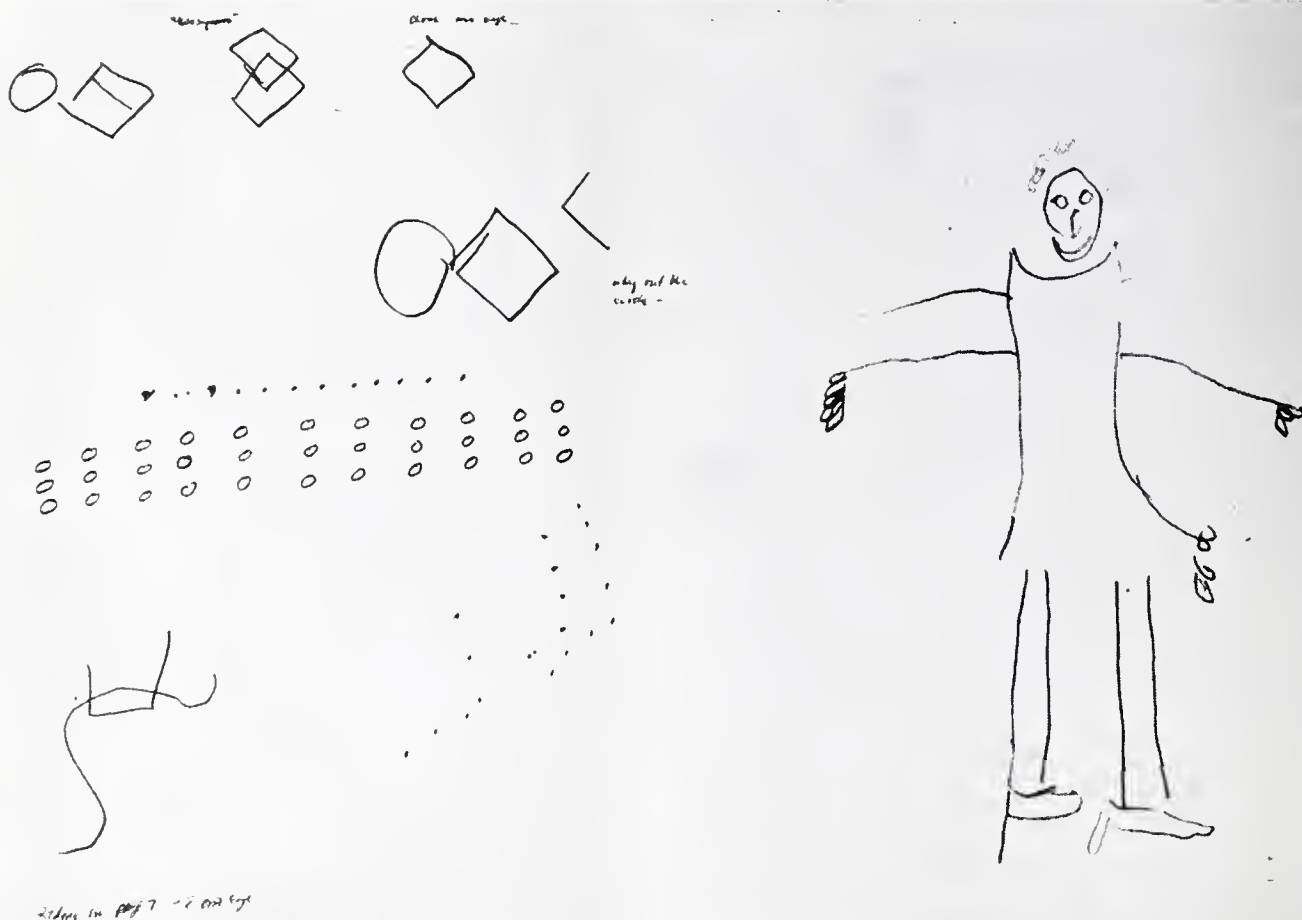


Figure 10.

Test performances by a 40-year-old male suffering recurrent intracranial pressure one year following the removal of a glioblastoma from the right occipital area. There was a left homonymous hemianopsia, but only limited neurologic deficit otherwise, and this related to the parietal lobe functions. There was vertical diplopia which led to a major difficulty in the performance of these tests. His confusion in the performance was readily resolved by placing the examiner's hand before either eye (eliminating the double vision), but the patient could not learn to adopt this device for himself. His attempt to reproduce what he appreciated as a double image is evident in the duplication of the Bender card A. The third configuration from the top left shows his capacity to overcome the problem when one eye is closed. As he progressed to the fourth and fifth cards the confusion and difficulty returned as he again had both eyes opened.

The figure drawing test was particularly perplexing to the patient, and this can be seen in the uncertainty of the placement of the hands on the figure. His performance was again facilitated with the passive obliteration of the vision of one eye. There is no lateralization of defect to suggest an effect of the hemianopsia. The patient was simply unable to adopt the repeatedly suggested corrective device, and this was interpreted as a loss in his capacity to integrate the visual information presented—an integrational defect.



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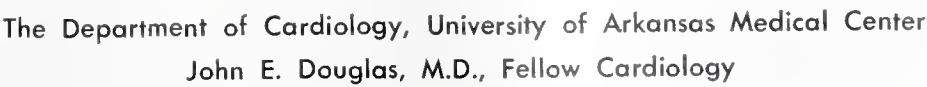
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OF THE MONTH

See Answer on Page 169





Jefferson County Program for Combined Hospital-Home Care for Premature Infants

The combined Hospital-Home Care Program for premature infants began December 15, 1961 although much study, training and preparation had been underway for the preceding several months. The purpose of the Project is to determine the feasibility of early discharge from the hospital of premature infants who have stabilized and are gaining weight well, without waiting until the infants reach an arbitrary weight.

It is felt that the use of weight as the major criterion for hospital discharge of the premature infant needs evaluation. Many infants are kept in the hospital beyond the time they need special care and observation if kept until they reach an arbitrary weight. They are exposed to cross infection during this period and sometimes newborn infants not gaining well in the nursery do better with an improved mother-child relationship at home. Psychologically, it seems desirable to minimize the period of separation between mother and child. Economically, the cost of premature infant care can be devastating to a family not covered completely by hospitalization insurance.

The advisability of the Program received impetus from the observation of several premature infants thriving and progressing very well in their own home environment. It was acknowledged that if time and cost of hospital care could be safely reduced it would be of great benefit to the family and the community.

The participating agencies involved in the Program are Jefferson Hospital at Pine Bluff, Arkansas and the Jefferson County Health Department. Support is provided by the Arkansas State Department of Health through the Maternal and Child Health Division. Jefferson Hospital has four nurseries (12 bassinets each)

allowing the rotation system plus two "suspect nurseries". Isolettes are available and there is a large, well-equipped pediatric ward which has facilities for caring for infants.

The medical director of the Jefferson County Health Department serves as Project Director of the program. He works closely with the pediatrician in charge of the nurseries and other staff personnel at Jefferson Hospital, members of the local medical society and the State Department of Health. The pediatrician in charge of the nurseries works closely with the public health nurses in assuring that the infant will receive adequate care in its home environment after discharge from the hospital. The work of the public health nurse in preparing the home and assisting with care of the premature infant after discharge from the hospital contributes a valuable part of the Program.

Several physician-nurse teams and the State Maternal and Child Health Nursing Consultant have attended the Cornell Premature Infant Institute. One physician-nurse team attended the course at Colorado and one public health nurse supervisor attended a course in Illinois for special instruction in premature care. In addition to the out-of-state institutes attended by several of the doctors and nurses, regular in-service educational programs have been held for the other nurses. These included the nurse's role in child health supervision with special attention directed to the care of the premature infant in the home.

The Program is available to all premature infants in Jefferson County. Efforts are made to hospitalize all premature infants born at home with a birth weight of five pounds or less. Premature infants delivered at home by midwives are reported to public health nurses who then contact the pediatrician at Jefferson Hospital

to arrange for admission to the hospital. When a premature infant is born in the hospital, the supervising public health nurse is notified. Once the infant is stabilized and gaining weight steadily, as determined by the pediatrician, and the public health nurse finds the home is ready, the baby will be discharged.

The pediatrician will maintain close contact with the public health nurses, give instructions for follow-up and be available for consultation. Jefferson Hospital will rehospitalize the infant if this is necessary. The public health nurse will routinely check the infant daily for the first three days he is home, then weekly for the next four weeks and give follow-up examination at approximately six months and one year of age. Some infants may need to be checked more often. Routine well-child conferences are provided by the Jefferson County Health Department.

Complete individual records regarding each infant are kept in the Jefferson County Health Department. Any mortality after discharge and any morbidity detected during check-ups is investigated and reviewed by the local premature advisory committee consisting of three pediatricians and an obstetrician. This committee plus the local health officer and the supervising public health nurse will review the Program periodically.

From the beginning of the Program (December 15, 1961 through December 31, 1970) there were 1284 live births reported for Jefferson County of infants weighing five pounds, eight ounces or less. Eight of these 1284 babies died prior to admission to the hospital or Home Care part of the Program. One hundred eighty-one of the 1284 infants died in the hospital prior to admission to the Home Care part of the Program.

Of the 1284 live births reported above, the following number of premature infants were not admitted to the Home Care part of the Program for the following reasons:

Expired prior to admission to Program	189
Non-residents	53
Not referred to the Program	75
Public Health Services refused	107

There were 1096 infants weighing 5 pounds, 8 ounces or less at birth who survived the first seven days of life. Five hundred seventy of these infants were discharged from the hospital weighing less than five pounds. The smallest discharge

SURVIVAL RATES FOR THE FIRST SEVEN DAYS OF LIFE*

Birth Weight	Number of Deaths		Survival Rate
	Number of Live Births	Under Seven Days	
Less than 1 lb.	6	6	0
1 lb. to 2 lbs., ¾ oz.	52	48	7
2 lbs., 1 oz. to 3 lbs., ¾ oz.	92	53	42
3 lbs., 1 oz. to 4 lbs., ¾ oz.	206	48	76
4 lbs., 1 oz. to 5 lbs., ¾ oz.	491	21	96
5 lbs., 1 oz. to 5 lbs., 8 oz.	437	12	97
TOTALS	1284	188	85

*Source: Progress Report released in 1971.

weight reported is 2 pounds, 12½ ounces. This baby weighed 16 pounds when discharged from the Program at one year of age.

Through December 1970, a total of 860 premature infants had been admitted to the Home Care part of the Program. Six hundred of these infants have completed one year of life and have been discharged from the Program. Thirty-one infants expired under one year of age while under the Home Care part of the Program and 44 were still on the Program at the end of December, 1970. A total of 185 infants had been lost to supervision while under Home Care. Most of these apparently moved out of the county or State.

The staff working on the Premature Program are very enthusiastic and pleased with the results, so far. It is felt that the Program has been a successful and profitable venture and will continue to be. Evaluation services are offered to premature infants previously carried on the Program after they have reached the age of five years. An analysis of these evaluations should prove beneficial in the future.



ANSWER—Electrocardiogram of the Month

Pacemaker rhythm as 66 per min., with frequent premature ventricular depolarizations. Many of these premature beats are followed by pacemaker response (fixed rate pacemaker) with the stimulating impulse falling on the T wave precipitating ventricular tachycardia. In this patient, speeding the fixed rate of the pacemaker to 88 per min. abolished this problem. However the introduction and ready availability of demand pacemakers have virtually eliminated this clinical predicament.



EDITORIAL

The Leaf on the Pond

Alfred Kahn, Jr., M.D.

There is virtually no quarrel between organized medicine and some of the self appointed messiahs in the political arena concerning the quality of professional knowledge of the average American physician; there is no argument concerning the quality of American medical research. In short, it is generally conceded that American physicians are knowledgeable professionally. Medical research in America has general approbation as witnessed by ample monies given for research, a vast number of medical publications, a welter of foreign visitors attending our meetings and medical instructions, and the favorable morbidity and mortality statistics in most areas of disease.

What then is the bone of contention? It is largely economics. Admittedly, there are imperfections in the delivery of health services; there is a maldistribution in the number of physicians in the city versus those in the rural areas. Furthermore, the complexity of modern medicine is witnessing the demise of the solo practitioner who was proficient in all fields. Accepting these facts and some others of lesser consequence — which the American medical profession is trying to remedy by education, persuasion and joint ventures with the U. S. Government — would organized medicine still be a political football, and the answer is yes on the grounds of economics.

To lay the blame on the high cost of medical care at the physician's feet is to take the matter out of context. Statistics which are probably reliable show that physicians' fees have increased, but certainly not at the same sky-rocketing rise as the cost of hospitalization excluding professional costs. The simple truth of the matter is

that the cost of physicians' fees has gone up as part of a shattering inflation which in a measure has been spawned by some of the same critics who criticize the high cost of medical care. Physicians are subjects to the same economic pressures of the public at large including rising rents, rising food prices, rising costs of office personnel, rising costs of medical equipment, rising costs of expendible supplies, as x-ray films, and so on ad infinitum. If the cost of the prerequisites to practical medicine and if the cost of necessities for moderate living are going up, up, up, up; what recourse does the physician have except to charge higher fees.

To blame the Medical Profession for the increasing cost of medical care is wearing blinkers when viewing the economic horizons. The cost of medical care is inseparable and interwoven in the economic patterns of our country.

Why do physicians charge fees. First of all, we live in a capitalistic society where it is customary to charge fees. Secondly, the physician has great expenses prior to entering practice including the cost of attending medical school and graduate education. Thirdly, as people in a free society, they are obligated to pay their living expenses and professional bills.

Actually, the medical profession is pretty much a leaf on the economic pond. It is subject to the vagaries of economic conditions. When the winds of depression blow, physicians' earnings fall off. When the country is prosperous, physicians prosper. In time of inflation, physicians suffer like everyone else. The rising cost of medical care is largely the result of the rising cost of labor in the office and hospitals, the higher costs of medical supplies and rents, and the

understandable need for the physician to maintain his living standards, which are compatible with a learned profession.

In the reasonable confines of this discussion, there are some other matters worthy of note. First of all, dissatisfactions with the delivery of medical care may eventually result in largely group practice. The individual general physician is under a great strain if he does not have partners to enable him to have some free time for rest. Moreover, it probably will be easier to get groups strategically located in various geographic areas than a solo physician in every community. The specializing physicians may fair better in groups in order to offer a wider spectrum of medical expertise. The matter of prepayment health insurance has been tried and discussed. Its weaknesses include the need for large groups

to be actuarially dependable in establishing fees; the regimentation by third party intervenors, who often try to dictate not alone fees but medical practice; the human element in patients that leads to overuse and the human element in physicians for exploitation at times.

A ready solution for the rising costs of medical care would be the stopping of a ruinous inflation in this country. If there is going to be a steady devaluation of currency, no doubt the profession will be under great pressure to accept some form of socialism at the great cost of some personal liberty. Perhaps a continuing dialogue between responsible physicians and responsive government can result in some amelioration of a potentially serious malady, namely, the prevention of an excessive rise in the cost of medical care in an inflationary economy — if such should arise or appear to be incipient.



THINGS



**TO
COME**

The Medical Society of Milwaukee County and the Hospital Council of the Greater Milwaukee Area will co-sponsor a Mid-America Hospital Medical Staff Conference during the week of June 19-23, 1972, at the Abbey in Fontana, Wisconsin.

The Conference, which is designed for physicians, hospital administrators, and trustees, is similar to the Conference conducted annually at Estes Park, Colorado, under the auspices of the University of Colorado School of Medicine. Dr. C. Wesley Eisele, the originator and director of the Estes Park Program, will conduct the Mid-America Conference.

SMA Meeting Scheduled

The 65th Annual Meeting of the Southern Medical Association will get underway November

1st at the Hotel Fontainebleau in Miami Beach, Florida, and continue through November 4th.

This outstanding general medical meeting will feature 21 scientific sections, scientific and technical exhibits, a symposium on medico-economics, a SMA Student Seminar, and many other activities.

Dr. David L. Barclay, Department of Obstetrics and Gynecology at the University of Arkansas Medical Center, is Chairman of the Section on Gynecology. Dr. J. Clyde Hart, Jr., of Pine Bluff, is the Vice-Chairman of the Section on Pediatrics, and Dr. James G. Stuckey of Little Rock is the Chairman of the Section on Plastic and Reconstructive Surgery.

For more information write:

Southern Medical Association
2601 Highland Avenue
Birmingham, Alabama 35205



MEDICINE IN THE



The President of the United States addressed the House of Delegates of the American Medical Association on June 22, 1971, at the Annual Convention in Atlantic City. The President's address was recorded on video-tape and is now available on 16-mm color film.

Because of the great importance of the President's message, it is hoped that county medical societies will show this film at their meetings. The AMA feels that local societies will find this film a useful tool.

The AMA urges use of the film so that a wide audience within organized medicine will have an opportunity to see and hear President Nixon's challenge to the profession.

Requests for the film should be made to the Arkansas Medical Society, Post Office Box 1208, Fort Smith, Arkansas 72901, telephone 501-782-8218.

* * *

A second step has been taken toward assuring quality education for medical assistants. Standards have now been revised to allow greater curriculum flexibility. Principal changes include the development of a basic one-year curriculum and allowance for medical specialty courses within the existing two-year program.

In addition, the curriculum may be established in vocational-technical schools, proprietary educational institutions, and military-based schools as well as junior, community and senior colleges. Adequate clinical facilities are one of the requirements for approval.

The revised standards or "essentials" supplement the original two-year medical assisting curriculum developed jointly by the American Medical Association (AMA) and the American Association of Medical Assistants (AAMA) two years ago.

Mrs. Marian G. Cooper, CMA, chairman of AAMA's Curriculum Review Committee, pointed out that "with these changes, AAMA can make available a single package of standards. The one-year curriculum," she said, "offers the funda-

mentals of medical assisting for students who must limit their advanced education. It provides a basic knowledge of anatomy and physiology, medical terminology, medical law and ethics, psychology, bookkeeping, insurance claims, and clinical procedures. This program leads to a one-year medical assisting certificate.

"The two-year program," Mrs. Cooper continued, "leads to an Associate degree and offers both basic and advanced medical assisting courses, including the humanities and social sciences or electives in a particular medical specialty.

"Although advanced education for medical assistants is relatively new, more and more physicians are requiring it. Years ago a doctor could train his medical assistant on the job. However, the increasing demands for health care have made it necessary for him to look for employees already qualified," she concluded.

Most medical assistants are employed in a physician's office or other medical facility under such jobs titles as medical assistant, medical secretary, receptionist, bookkeeper or medical office manager. They are the direct link between the physician and his patients, his professional associates, and the suppliers of equipment and medications.

Mrs. Cooper announced that five more junior colleges were added to the list of institutions offering approved two-year medical assisting programs: Broward Junior College, Ft. Lauderdale, Fla.; De Anza College, Cupertino, Calif.; El Camino College, Van Nuys, Calif.; Lorain County Community College, Elyria, Ohio; and University of Toledo (Ohio) Community and Technical College.

For further information contact the American Association of Medical Assistants, One East Wacker Drive, Chicago, Illinois 60601.

* * *

THE MONTH IN WASHINGTON

The American Medical Association supported President Nixon's legislation to create a special White House office to coordinate the federal gov-

ernment's fight against drug abuse "as an important element of the national campaign."

The AMA support was outlined by Dr. Maurice H. Seevers, chairman of the department of Pharmacology at the University of Michigan and a member of the AMA Committee on Alcoholism and Drug Dependence, before the House Public Health and Environment Subcommittee. He was accompanied by Dr. Richard E. Palmer, a member of the AMA Board of Trustees.

Dr. Seevers said that "under Dr. Jerome Jaffe's able direction the (White House) Special Action Office can become a most effective instrument" in achieving the purpose of the legislation:

"... to focus the comprehensive resources of the federal government and bring them to bear on drug addiction and drug abuse with the immediate objective of promptly and significantly reducing the incidence of drug addiction and drug abuse in the nation within the shortest possible period of time."

"We have two additional observations regarding this stated objective," Dr. Seevers said. "First, although prompt and decisive action is to be desired as a goal, it should be clearly recognized that there are no panaceas for the prevention or successful treatment of drug dependence. Drug dependence is a complex phenomenon that does not lend itself to quick or simplistic solutions.

"Our second observation is related to that fact: Well-conceived multi-faceted research is needed on a broad scale to devise effective means of coping with this problem.

"With respect to the drugs themselves, while much is known about their properties, relatively little is known about their precise mode of action in the human organism and the exact nature of the long-term effects of their regular use by man.

"While some of the factors which lead individuals to abuse drugs are understood, science is not yet able to predict who may be vulnerable to drug dependence. The role of drug abuse within the context of a total life style also needs to be more clearly delineated.

"Much work remains to be done in developing new, and evaluating existing, treatment methods in terms of the therapeutic needs and psychosocial makeup of the individual patient. Physicians can treat the acute effects of drug abuse and drug dependence, often preventing serious physical and psychological consequences; but medical and sociological management techniques

have not been developed so as to insure that a significant number of patients will not return to abuse of drugs and to their patterns of dependence after the acute symptoms have been abated through treatment.

"Methods of 'reaching out' to the young drug abuser must be tested to ascertain the most effective courses that educators, physicians and those in other professions can pursue.

"Finally, a great deal more work should be carried out with human subjects. Especially needed are longitudinal studies encompassing etiology, diagnosis, treatment and after-care, even though such studies would require an extended period of years."

Dr. Seevers cautioned that "the technique of treating heroin dependence through methadone maintenance, although offering hope and the possibility of social rehabilitation to a number of dependent persons, is but one of several modalities which can be useful".

* * *

The American Medical Association set forth its recent record on legislation—a record that shows statements in support of health care proposals in 31 of 35 appearances in the 91st Congress and support in the present Congress for medical school expansion, increased financial aid to medical students, family practice training programs and full funding for maternal and child care programs.

"It requires a certain strain on the process on human logic to interpret this record as negative," the AMA stated.

The AMA's record on legislation was submitted as part of a 39-page statement filed by the organization with the Subcommittee on Administrative Practice and Procedure of the Senate Judiciary Committee. Subcommittee Chairman Sen. Edward M. Kennedy (D-Mass.) had charged the AMA with maintaining a negative and obstructionist attitude toward proposals to improve health care in the United States during a hearing by the subcommittee on July 14.

Bills supported by the AMA in the 91st Congress included appropriations for hospital and medical facilities construction, appropriations for medical education, drug abuse education and narcotic addict rehabilitation, vaccination assistance programs and regional medical programs.

The AMA opposed as unnecessary the proposed Commission on Marihuana; opposed one

version of the Occupational Safety and Health Act of 1969 but supported another version in both the Senate and House; and opposed certain parts of the Social Security Amendments of 1970 while supporting other parts of the bill.

This affirmative legislative stance has been maintained in the present Congress, as many members of the Senate and House from both sides of the aisle will attest, the AMA noted.

The AMA, in its statement, pointed out that it has introduced its own proposal for financing health care — Mediredit — which would provide government subsidized health insurance to the poor and insure against catastrophic medical costs.

"Mediredit is designed to end for all Americans the burden of expense, and to make all Americans truly equal in their access to all types of medical care," the AMA said.

The organization warned against the "panacea" approach of a massive government health program as recommended by Kennedy.

"We have learned that lesson in welfare and poverty," the AMA said. "Must we learn it anew with health care?"

Regarding specific charges leveled against the organization and doctors generally by Kennedy, the AMA statement termed them "out of date, out of context, and out of balance."

"And his conclusion, that doctors act primarily for gain, is outrageous," the AMA report stated.

Contrary to Kennedy's charges, the AMA noted, it does not and has not opposed vaccination programs, group practice, an increase in the number of doctors, private health insurance, government support for medical education, innovations in medical school curricula, equal opportunity in medical education or peer review.

The AMA cited its public record and policy statements over the years to refute these charges in detail.

The AMA did object to Medicare at the time of its passage because it believed available government funds should not be used to provide assistance to those who did not need it and because of the unsound actuarial basis on which it was predicated. Premiums have since had to be raised several times to support the program, the AMA noted.

After Medicare became law, both the AMA and doctors generally gave it full support and

worked to make the program a success, the statement added.

In further response to other testimony before the subcommittee on the same date, the AMA denied that it was responsible for "major weakening" of the proposals offered in 1964 by the Heart Disease, Cancer and Stroke Commission, which called for 60 regional clinical and care complexes.

Citing the record once again, the AMA pointed out that the legislation was hastily drawn and was submitted to Congress without sufficient supporting data. This fact was recognized and alluded to by Kennedy himself at the time, the AMA noted.

Two of the commission's own subcommittees had serious reservations about the legislation, the AMA stated, and it was only after AMA officials worked in close cooperation with Johnson Administration officials that the bill was salvaged with an emphasis on pilot projects to test the theories and concepts advanced by the commission.

The AMA completed its statement:

"Let us set aside old, worn-out charges. Let us set aside emotional language and political opportunism. Let us, instead, seek together valid and workable solutions to the health care problems that confront us.

"The AMA will support every such effort."

* * *

Dr. Richard S. Wilbur, new assistant defense secretary for health and environment, proposed that the military services pay physicians substantially more to avoid a severe shortage of medical skills when the services switch to an all-volunteer basis in mid-1973.

Dr. Wilbur, who succeeded Dr. Rousselot in the defense department's top medical post, is on leave of absence as the American Medical Association's deputy executive vice president.

At his confirmation hearing, Dr. Wilbur told the Senate Armed Services Committee that the health and environmental problems of the defense department cannot be entirely separated from the civilian population's. Among the major problems facing Dr. Wilbur in his new post are filling the armed services' needs for physicians, drug addiction in the services and whether there should be a military medical school.

He told Pentagon newsmen that he opposes establishment of such a school at this time. It

has been a favorite project of Chairman Edward Hebert (D-La.) of the House Armed Services Committee and Dr. Rousselot. Dr. Wilbur said he was not enthusiastic about a military medical school because it would not begin producing enough doctors to be worthwhile for many years.

Dr. Wilbur predicted that the military will have "a severe health care shortage when the draft is gone" unless something is done about it.

Wilbur said the problem boiled down to money and that experienced doctors could make much more on the outside than they do in the military. There are currently 14,500 physicians and 6,000 dentists in the services.

Wilbur said the need was to induce doctors with eight or ten years service to stay in the

military. At present, these men leave in large numbers and the services are forced to draft young doctors whom Wilbur described as "ineffective" because they lack experience. He said the services calculated that each brand new doctor putting in 24 months in uniform actually produced only 14 months of work.

A doctor with ten years in the service now gets \$350 more a month than other officers of equal rank.

Wilbur said to retain experienced doctors and yet convince Congress to go along with an added bonus scheme, the military might just do with fewer doctors. Under this plan, he said, the actual budget for doctors' pay would remain unchanged but the funds would be spread among fewer men.



NEW MEMBERS

Dr. William Albert Jones

Boone County Medical Society announces the addition of Dr. William A. Jones to its membership roll. He is a native of Newburgh, New York.

Dr. Jones served in the United States Army from 1955 to 1957. He attended Columbia University in New York City and, in 1965, was graduated from the St. Louis University School of Medicine, St. Louis, Missouri. His internship was completed at St. Louis City Hospital #1, as well as a residency in Radiology.

Dr. Jones has been in practice in Harrison, Arkansas, for one year. His office is located in the Boone County Hospital.

Dr. Donald William Kreutzer

Dr. Donald W. Kreutzer is a new member of the Boone County Medical Society. He was born in Covington, Kentucky.

Dr. Kreutzer received a B.S. degree in chemistry from the University of Cincinnati in 1960 and was graduated from the University of Kentucky College of Medicine, Lexington, Kentucky, in 1964. He interned at the Cleveland Metropolitan General Hospital in Cleveland, Ohio. His residency work in Pathology was at the University of Missouri in Columbia, and at the Medical College of Virginia in Richmond. Dr. Kreutzer served with the United States Army Special Forces from 1966 to 1968.

Dr. Kreutzer's office is located at the Boone County Hospital in Harrison. He is a member of the American Society of Clinical Pathologists.

Dr. Paul M. Anderson

Dr. Paul M. Anderson, a native of Marshalltown, Iowa, is a new member of the Sebastian County Medical Society.

He received his pre-medical education at Drake University in Des Moines, Iowa, and the State University of Iowa, Iowa City, Iowa. He was granted a B.A. degree from the latter in 1957. In 1961, he was graduated from the University of Iowa College of Medicine. Dr. Anderson served with the United States Public Health Service from 1961 to 1965, during which time he completed his internship. From 1966 to 1970, Dr. Anderson had residency training in General

Surgery at the Scott and White Memorial Hospital in Temple, Texas.

Dr. Anderson is associated with Dr. Marlin Hoge and Dr. Samuel Landrum at 314 North Greenwood in Fort Smith.

Dr. Mary Ann Anderson Mullican

Dr. Mary Ann Mullican is a new member of the Sebastian County Medical Society. Dr. Mullican was born in Henderson, Texas.

She received a B.S. degree from the University of Oklahoma, Norman, Oklahoma, in 1962, and was graduated from the University of Oklahoma School of Medicine in Oklahoma City in 1966. Dr. Mullican's internship was completed at the University of Oklahoma Medical Center Hospitals in Oklahoma City. She completed a General Radiology residency at Parkland Memorial Hospital in Dallas, Texas, in 1970.

Dr. Mullican's office for the practice of General Radiology is located at Sparks Regional Medical Center in Fort Smith.

Dr. Edward John Safranek

Dr. Edward J. Safranek is a new member of the Sebastian County Medical Society. He is a native of Omaha, Nebraska.

Dr. Safranek received his pre-medical education at the Creighton University in Omaha, and was graduated from the Creighton University School of Medicine in 1956. His internship was completed at St. Catherine's Hospital, also in Omaha. From 1957 to 1959, Dr. Safranek served with the United States Public Health Service. In 1961, he completed a residency in Anesthesia at the University of Iowa Hospitals, Iowa City, Iowa. Dr. Safranek practiced in Fort Dodge, Iowa, for nine years before coming to Arkansas.

He is a Diplomate of the American Board of Anesthesiology, a Fellow of the American College of Anesthesiology, and a member of the American Anesthesia Society.

Dr. Safranek's office is at 216A North Greenwood Avenue in Fort Smith. His practice is limited to Anesthesia.

Dr. Carl Joseph Raque

Dr. Carl J. Raque has been accepted for membership in the Pulaski County Medical Society. He was born in Jefferson County, Kentucky.

Dr. Raque was graduated from the University of Louisville College of Arts and Sciences. In 1965, he received his M.D. degree from the University of Louisville School of Medicine, Louis-

ville, Kentucky. His internship was completed at the William Beaumont General Hospital in El Paso, Texas. His residency work in Dermatology was at the Hospital of the University of Pennsylvania in Philadelphia.

Dr. Raque is associated with Dr. G. Thomas Jansen, Dr. W. Mage Honeycutt, and Dr. Michael G. Keeran in the practice of Dermatology at the Little Rock Dermatology Clinic in Little Rock. He serves as a clinical instructor in the Department of Dermatology at the University of Arkansas Medical Center and is a member of the American Academy of Dermatology.

Pulaski County

The following interns and residents are new members of the Pulaski County Medical Society:

University of Arkansas Medical Center:

Joe Paul Alberty, Resident—Orthopedic Surgery

Alan E. Aycock, Resident—Surgery

Ronald W. Baggett, Resident—Surgery

Margaret D. Beasley, Resident—Anesthesia

David W. Bevans, Jr., Resident—General Surgery

Jerry D. Blaylock, Resident—Psychiatry

James H. Bledsoe, Resident—Surgery

James H. Fraser, Jr., Resident—Obstetrics/

Gynecology

Cheryl D. Friday, Resident—Anesthesiology

James H. Golleher, Resident—Pathology

Surinder N. Gupta, Resident—Neurosurgery

Joel E. Holloway, Resident—Dermatology

James R. House, Jr., Resident—Anesthesiology

Ralph H. Jennings, Resident—Obstetrics/

Gynecology

Ray W. Leavelle, Resident—Radiology

Charles A. Ledbetter, Resident—Orthopedics

Virgle E. Lyons, Jr., Resident—Surgery

Charles M. McClain, Jr., Resident—Radiology

Ord J. Mitchell, Resident—Neurology

Lee A. Nauss, Intern

Barry L. O'Neal, Intern

William F. Payne, Resident—Pediatrics

John A. Rapiejko, Resident—Anesthesiology

John R. Sellars, Resident—General Surgery

James M. Sims, Resident—Psychiatry

Joel F. Spragins, Resident—Gastroenterology

Jan T. Turley, Resident—Urology

Cynthia L. Worrell, Resident—Pediatrics

Baptist Medical Center:

Clarence E. Ballard, Jr., Intern

Richard C. Bellas, Intern

Edwin C. Jones, Resident—Family Practice

Hosea W. McAdoo, Jr., Resident—Radiology



PERSONAL AND NEWS ITEMS

Dr. Henderson Receives Appointment

Dr. Francis M. Henderson of Pine Bluff has been appointed Director of the Arkansas Health Systems Foundation, which is a State agency with Federal financing. Dr. Henderson was appointed by Dr. Roger Bost, Director of the Department of Social and Rehabilitation Services. The Foundation, under a contract with the National Center for Health Services Research and Development, designs programs for primary health care. Its basic goal is to develop a comprehensive personal health system through joint private and public effort.

Dr. Easley Guest Speaker

Dr. Edgar J. Easley of Little Rock was the guest speaker at the August meeting of the Malvern City-County Board of Health. Dr. Easley spoke on the program of public health in Arkansas and how to interest the local community in improving its public health.

AAGP Holds Meeting

Dr. Kemal Kutait of Fort Smith was installed as president of the Arkansas Academy of General Practice at its 24th Annual Scientific Assembly held in Little Rock on August 19th and 20th. Dr. W. H. Lane of Dover is immediate past-president.

Guest speakers at the two day meeting included Dr. Kelsy Caplinger, Dr. John V. Busby, Dr. J. Malcolm Moore, Dr. E. Stewart Allen, Dr. Raymond Miller, Dr. David A. Miles, Dr. Thomas Fletcher, Dr. Johnson Baker, and Dr. Travis Crews.

Physician and Wife Receive Law Degrees

Dr. Morris M. Henry and his wife, Ann, of Fayetteville received their Juris Doctor degrees at commencement exercises of the University of Arkansas Law School on June 5, 1971. They passed their State Bar exams in July.

Mrs. Henry plans to establish a law practice in Fayetteville.

Physicians to Provide Service to Hospital

Dr. Robert E. Richardson and Dr. John D. Pike of Little Rock have agreed to provide surgical services at Mercy Hospital in Brinkley. The physicians will perform elective surgery in the modern and well-equipped surgical suite in Mercy Hospital. Local physicians will take care of the pre- and post-operative treatment of the patient, as well as assisting in surgery.

Physicians and Clinics Announce New Associates

Dr. Walter P. Harris of Danville announces the addition of *Dr. William A. Coger* to his staff; Dr. Coger is a general practitioner.

Dr. Porter R. Rodgers, Jr., of Searcy announces the association of *Dr. James A. Simpson* for the practice of general, thoracic and peripheral vascular surgery.

The Saltzman-Guenthner Clinic at Mountain Home announces the addition of *Dr. K. Simon Abraham* to the clinic staff as surgeon and physician.

Dr. Bruce M. Bevill has joined the staff of the Monroe Clinic in Mountain View. Dr. Bevill will serve as a general practitioner and as an aide to Dr. Howard Monroe.

Dr. Bates Meets With Physicians

As one of the consultants in the Continuing Education Program for Physicians, Dr. Joseph Bates of Little Rock met with physicians in the Dumas and Monticello areas during the past month. The Continuing Education Program for Physicians is a University of Arkansas Medical Center project funded by the Arkansas Regional Medical Program.

The sessions dealt with various problems experienced by local physicians. The courses are extensions of new techniques and methods being taught at the University of Arkansas Medical Center.





OBITUARY

Dr. Stephen D. McMillion

Dr. Stephen D. McMillion died August 30th at the age of 51. He was born in North Little Rock, Arkansas.

Dr. McMillion was a graduate of the University of Arkansas School of Medicine and served his internship at the Army and Navy Hospital in Hot Springs.

He was a member of the staff of the Baptist Medical Center, St. Vincent Infirmary and Memorial Hospital at North Little Rock, a member of the Little Rock Consistory and Scimitar Shrine Temple, and a member of the Gardner Memorial United Methodist Church. Dr. McMillion was a Mason and a veteran of World War II.

He is survived by his wife, Susan Jackson McMillion, and two sons, one stepson, three daughters, and his father and stepmother.

Dr. Howell William Brewer

Dr. Hal Brewer, formerly of Hot Springs, died August 13th in Memphis, Tennessee. He was 83 years of age.

Dr. Brewer was graduated from the University of Arkansas School of Medicine in 1915. He practiced in Hot Springs for twenty-five years, during which time he organized a Civitan Club, and was director of camping activities for Boy Scouts.

Dr. Brewer was a veteran of World War I and II, a Mason, and a member of the Grace United Methodist Church at Memphis. He was a member of the American Medical Association, a life member of the Arkansas Medical Society, and a member of the Garland County Medical Society.

Survivors include his wife, Lillian Farris Brewer, three daughters, one sister, and four grandchildren.

Dr. William R. Brooksher

Dr. William R. Brooksher of Fort Smith died September 4, 1971. Dr. Brooksher was born in Fort Smith on December 8, 1894.

He was a graduate of Tulane University School of Medicine and was a Diplomate of the American College of Radiology.

Dr. Brooksher served as president of the Sebastian County Medical Society in 1924. He served as secretary of the Arkansas Medical Society for 19 years, and was named Secretary Emeritus in 1953. He was editor of the Journal of the Arkansas Medical Society from 1933 to 1954. Dr. Brooksher served as president of the Arkansas Medical Society in 1954. He served in the American Medical Association House of Delegates from 1934 to 1954.

Dr. Brooksher was a past president of the Arkansas Chapter of the American Cancer Society. He served many years on the Arkansas State Cancer Commission.

Dr. Brooksher had served on the Executive Committee of St. Edward Hospital in Fort Smith for forty years. He was Director of the Department of Radiology at that hospital at the time of his death.

In 1958, The Arkansas Medical Society established the "Dr. and Mrs. W. R. Brooksher Student Loan Fund" to aid students training as medical technologists, X-ray technicians, physical therapists, occupational therapists, and medical social workers.

Dr. Brooksher's wife, Peggy Stephens Brooksher, died in January, 1970. Mrs. Brooksher had served as the president of the State Auxiliary and had also been active in Cancer Society work. Their son, Dr. William R. Brooksher, Jr., died in 1962.



PHYSICIANS NEEDED

Brinkley, Arkansas, modern and growing on Interstate 40, between Little Rock and Memphis needs young General Practitioners and a surgeon. Brinkley has a servicing population of well over 8,000 with only four practicing physicians who are overworked. It has the only hospital in the county, a modern 42-bed general hospital and a 28-bed skilled care unit. Part time clinics for specialists, i.e., surgeons, urologists, pediatricians, etc., may be considered. The citizens, the medical staff and the hospital will welcome and assist new physicians in making a start. Contact Major Bill Riddle, Administrator, Mercy Hospital, 734-4141 for information.

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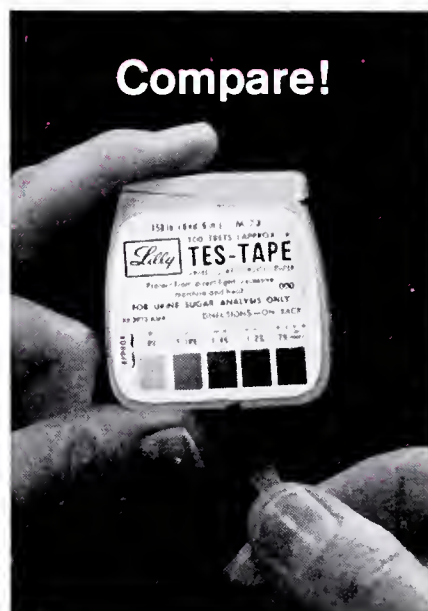
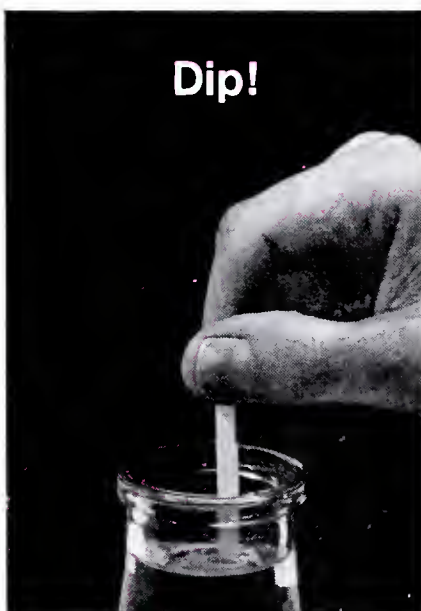
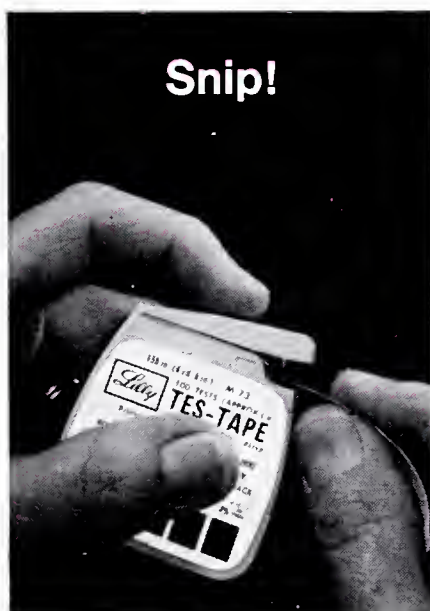
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THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

November, 1971

Vol. 68 No. 6

FORT SMITH, ARKANSAS



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Patients fell asleep quick

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.^{1,2}

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

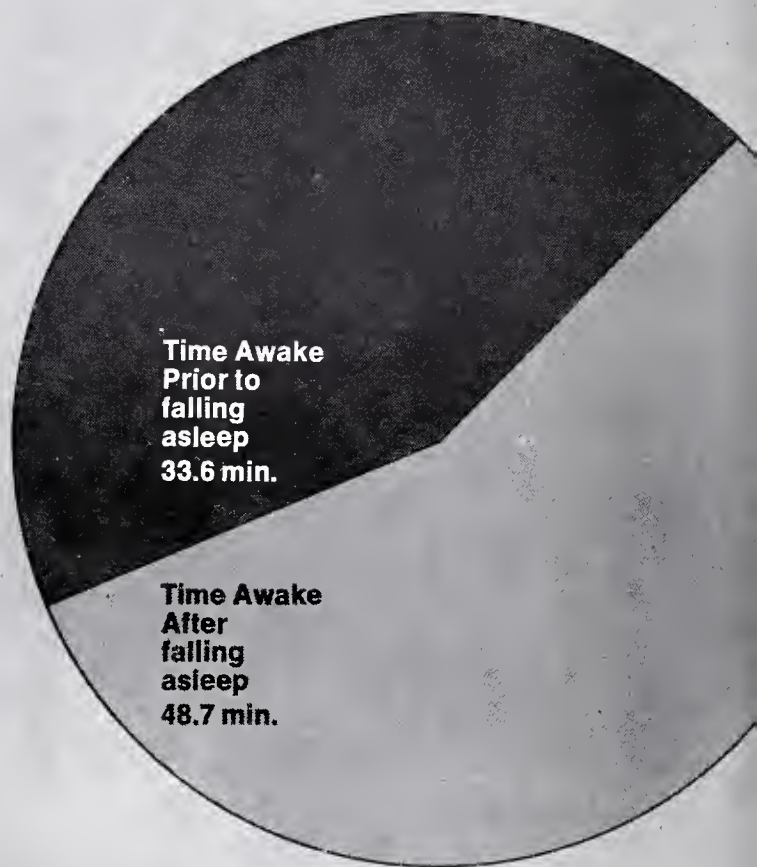
Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.

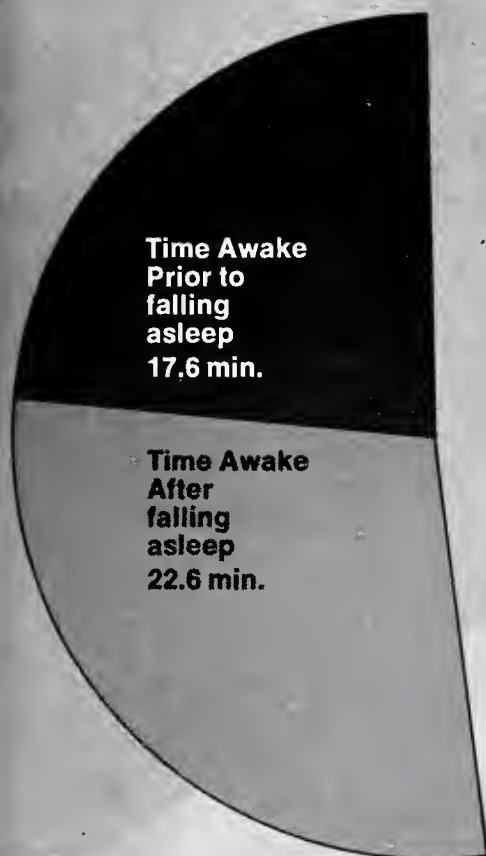
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

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(flurazepam HCl)



and slept through the night

On
Dalmane
(flurazepam HCl)



Average sleep laboratory measurements in cited studies

Parameter	Before Dalmane	On Dalmane
Time required to fall asleep	33.6 min.	17.6 min.
Wake time after onset of sleep	48.7 min.	22.6 min.
Number of wakeful periods after onset of sleep	12.2	8.4
Total sleep time	420.0 min.	447.5 min.
Total sleep percent	88.6	94.5

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The Remnant Lives

Joe B. Hall, M.D.*

A man from Sulphur Rock, Arkansas, has left a remnant of his spirit etched in the souls of many men. But for remnants such as this, American medicine, indeed American society, might go the way of Sodom and Gomorrah. The last day of 1878 saw the birth of a boy named Pope Leo Hathcock, III. Born to Protestant parents, perhaps the name was a symbol of the tolerance and understanding which was to be his hallmark. From the Ozark hills of Sulphur Rock, and Cave City, he made his way to Harrison, Arkansas, where he completed his secondary education. He received his M.D. degree from Vanderbilt University before the turn of the century. This degree, as well as a post-graduate course in New York City, contained little practical training.

On his first delivery he was so dependent on the infant's grandmother and so embarrassed by his ignorance that he threw his doctor's bag from the buggy into the first creek he crossed on the way home, and decided to give up medicine.

But he was a determined man, eager to learn. All of his senses hungered for knowledge and truth, with the excitement of a bird dog on the fresh scent of quail. This commitment to learning by personal observation, evaluation, and experimentation, is rarely seen in the spoon-fed student of today.

His eyes made observations from daily experience, observations that are not recorded in texts; because they cannot be described by words. I recall a child I had diagnosed as chickenpox getting worse when he should have been getting better. Fearful of smallpox, I asked Dr. P. L. to see the patient. Keen eyes surveyed the patient carefully. He asked two questions: "When did you go blackberry picking, son?" When informed it was just before he became ill, he asked, "Was the encrusted sore on your knee there when you

went to pick blackberries?" and the lad said yes. He reassured the lad and we stepped out. Correct diagnosis: chigger bites, infected with impetigo. "Gee," I thought, "we didn't see that in residency, and those questions aren't on any history sheet."

He learned to use his sense of smell as few people do. By coincidence, we walked into a hospital ward together one day. I was going to see a puzzling case of FUO. No sooner than we hit the ward, he sniffed twice and said, "Someone has a case of typhoid in here." Days later I was convinced by the cultures and the agglutinations, unnecessary and expensive tests for one with a trained nose.

His sense of touch was keen and accurate. He set fractures with perfect alignment, and as the patient was leaving, called down the hall, "By the way, go by X-ray and get a picture. The boys like to X-ray all fractures." He never looked at the X-ray; just an unnecessary expense made necessary by uneducated fingers.

He lived and helped others live by faith, never too hurried for kindness and understanding. One of the thousands of children he brought into the world came in sobbing but determined. Her puppy dog did not have to be shot because it had a broken leg; Dr. P. L. could fix a broken leg. So a busy practice came to a screeching halt while a puppy dog's leg was set and fixed. He convinced the young lady that her offer of a dime for services was twice his top charge; and for her dime, she got a nickel change, a handful of horehound drops, her hope justified and her faith established.

He was the great psychiatrist. Without X-ray, lab, or psychological tests, he recognized symptoms of a broken heart, a jealous wife, a greedy merchant, the child-like insecurity of a boastful

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man, an unfaithful husband, or an intellectually dishonest doctor. They all got about the same medicine. Each received, without pain, a deep injection of self-esteem and individual dignity, given in a vehicle of kindness, understanding and firmness. For those whose insight came slowly, he used pink, blue, or green aspirin. Unusually difficult cases might require both pink and green. Rarely, for the acutely agitated, one dram of tincture of phenobarbital TID was prescribed.

I never saw him sad; I never saw him hurried. He used to walk one to two miles to the hospital for rounds each day. When I stopped to pick him up, he smiled, thanked me, and said he couldn't afford to ride. His walk to the hospital was the thinking time of his rounds. His mature love made him unshakably secure and unbelievably humble. Doctor P. L. passed on August 27, 1969.



Further Experience With Azathioprine for Crohn's Disease

B. N. Brooke (St. George's Hosp, London), S. L. Javett, and O. W. Davison

Lancet 2:1050-1052 (Nov 21) 1970

Twenty-four patients with Crohn's disease of the intestine were treated with azathioprine over periods up to 21 months, 17 patients with the drug alone and 7 in conjunction with surgery. Results have been encouraging in the initial disease (especially colitis), recurrent disease, in the treatment of anal and abdominal fistulas, and as maintenance therapy in conjunction with surgery to prevent recurrence of the disease and of abdominal fistulas. Azathioprine alone has proved ineffective in the presence of a palpable fixed inflammatory mass if this is greater than might be expected from the thickened wall of the involved intestine alone and when radiological evidence has demonstrated considerable epithelial loss. Resection is then required, followed by azathioprine. It is not yet clear when azathioprine therapy can be withdrawn.

Immunoreactive Corticotropin Levels in Adrenocortical Insufficiency

G. M. Besser et al (8 Charis Court, Eaton Rd, Hove, Sussex, England)

Brit Med J 1:374-376 (Feb 13) 1971

Plasma concentrations of immunoreactive corticotropin (ACTH) have been determined in 14 patients with untreated Addison's disease and in 44 patients with secondary adrenocortical insufficiency. Basal morning plasma ACTH levels were markedly elevated in those with Addison's disease but either in the normal range or undetectable in the group with secondary adre-

nocortical insufficiency. In the group with Addison's disease, circulating ACTH values demonstrated a definite nyctohemeral rhythm, a marked rise in response to insulin-induced hypoglycemia and an immediate fall following the intravenous injection of corticosteroids, with a half-life of between 13.5 and 44.2 minutes. When assays were performed with antisera directed against the portion of the ACTH molecule responsible for corticosteroidogenesis (the N-terminal portion) the apparent ACTH concentrations were lower than with antisera directed against the non-steroidogenic (C-terminal) portion of the molecule. Different antisera may give different apparent hormone concentrations; the range of values obtained in normal and abnormal states must be established for each antiserum.

Exsanguinating Arterial Bleeding Associated With Diverticular Disease of Colon

K. Sorger (Mount Auburn Hosp, Cambridge Mass 02138) and M. R. Wacks

Arch Surg 102:9-13 (Jan) 1971

Three cases of massive arterial bleeding from diverticular disease of the colon are reported. All three have identical and distinctive pathologic findings. A horn-like protusion in the diverticulum marked the bleeding point. Microscopically this proved to be a ruptured, unusually large and tortuous submucosal artery. Awareness of this lesion combined with a thorough search to locate it can lead to successful identification of the point of bleeding. If this is done after a limited surgical resection the chances of recovery in the typically elderly, arteriosclerotic and hypertensive patient will be increased.

Adrenal Hypofunction Secondary to Adrenocortical Destruction by Metastatic Carcinoma of the Lung

Charles L. Weber, M.D. and Marvin L. Murphy, M.D.*

Introduction

Adrenal hypofunction due to secondary neoplastic involvement of the adrenal glands is uncommon. A review of the literature reveals approximately thirty cases.¹⁻²⁵ Many of the early cases reported are based on presumptive evidence such as gross replacement of adrenal tissue by tumor, altered electrolyte pattern suggestive adrenal hypofunction, clinical response to steroid administration, eosinophil count depression following adrenocorticotropin stimulation (ACTH), or a positive water loading test. The majority of reported cases are secondary to carcinoma of the lung, stomach, and breast, which is probably a reflection of the high incidence of these tumors in the general population. The present case is a primary carcinoma of the lung with widespread metastases including both adrenal glands with demonstrated hypofunction.

Case Summary

The patient was a 42 year old white male admitted initially to another hospital because of hemoptysis, cough, and pain in the right hip of two months duration. Biopsy of the left scalene, left inguinal and right axilla lymph nodes revealed metastatic adenocarcinoma. The patient was transferred to the Little Rock Veterans Administration Hospital for further care. Complaints on admission were chest pain, hip pain, nausea, and vomiting.

Physical examination revealed a chronically ill white male with evidence of weight loss. The blood pressure was 100/60. Numerous hard, non-tender nodules were found throughout the skin, some of which were superficially ulcerated. Marked adenopathy of axillary, cervical, and inguinal areas were noted. There was limitation of motion of the right hip because of severe pain.

Chest x-ray revealed a density in the left upper lobe compatible with bronchogenic carcinoma.

Bone survey showed osteolytic changes compatible with metastases in the first right metacarpal, proximal right femur, and skull. Blood volume determined by radioactive serum albumin was 3.9 liters (normal: 3.9-4.2 liters). Blood urea nitrogen was 17 mgm%. Hemoglobin was 12.3 gms. blood sugar determination ranged from 61 to 100 mgm%.

Following admission the patient received parenteral fluids, antiemetics, and analgesics. The patient had intermittent vomiting and initially the change in electrolytes was thought to be related to electrolyte loss. However, it became apparent that the profound changes observed were not the result of emesis and a diagnosis of adrenal hypofunction was considered. Serum electrolytes and the changes with administration of hypertonic saline is shown in Figure 1. An ACTH stimulation test was performed using 30 units of ACTH in 500 cc normal saline. The pre-ACTH plasma cortisol was 5 micrograms per 100 ml (normal 5-20 micrograms per 100 ml) and the 4 hour post-ACTH plasma cortisol was 5 micrograms. After the completion of the test, the patient was started on hydrocortisone 20 mgm and

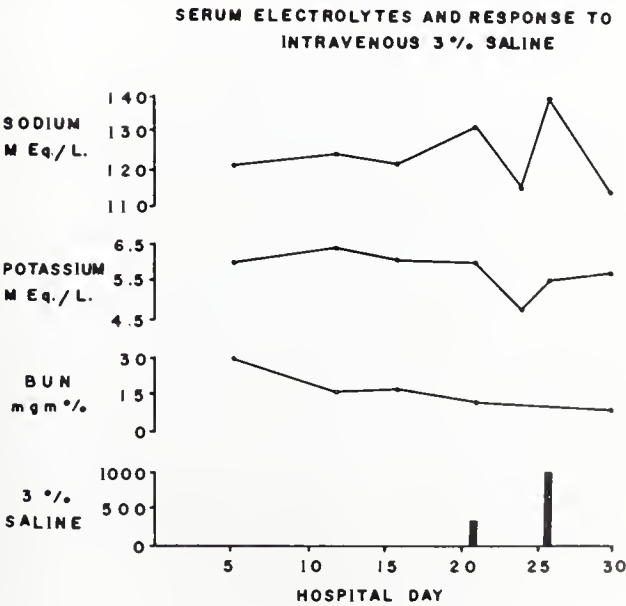


FIGURE 1
Serial serum electrolyte changes in a patient with adrenal hypofunction secondary to metastatic tumor.

*Associate Professor of Medicine, University of Arkansas School of Medicine, Chief, Cardiology Section, Little Rock Veterans Administration Hospital.

ADRENAL HYPOFUNCTION SECONDARY TO ADRENOCORTICAL DESTRUCTION
BY METASTATIC CARCINOMA OF THE LUNG

0.1 mgm 9-fluorohydrocortisone daily. He also received an initial dose of Alpha Sarcin as a chemotherapeutic agent. However, the patient died the following day.

Autopsy revealed a primary carcinoma of the lung with metastases to skin, lungs, heart, gall bladder, intestine, kidney, scalp, lymph nodes, vertebra, thyroid, and adrenals. Grossly the adrenals were replaced by neoplasm except for a suggestion of a thin rim of yellowish cortex. Microscopically there was complete replacement of adrenal tissue with tumor cells and the rim of yellowish cortex seen grossly was adipose tissue. (Figure 2)

Discussion

Metastatic carcinoma to the adrenal is not unusual. The incidence varies from 80% of 2,833 cases of primary carcinoma reported by Bulloch and Hurst²⁶ to 27% of 1000 cases reported by Abrams, Spiro, and Goldstein.²⁷ The chief offenders are those arising from lung, breast, and kidney.

Despite the frequency of metastases to adrenal glands, it is unusual to see the development of adrenal hypofunction. Even with gross replacement by tumor one cannot assume adrenal hypofunction is present. This is related to the fact that only a small amount of functioning adrenal tissue is necessary to maintain relatively normal function. The lack of response to ACTH stimulation in this case proves the diagnosis of adrenal hypofunction and the serum electrolyte changes observed are compatible with this. In chronic wasting disease or terminal malignancies plasma

corticosteroid levels may be normal or elevated, but ACTH stimulation results in increased plasma corticosteroids in comparison to control.^{28,29}

It is also recognized that patients with rapidly progressive neoplastic disease usually succumb to their disease before adrenal hypofunction ensues. However, the incidence may be higher than generally recognized. At times the clinical course of an advancing malignancy is not unlike that of chronic adrenal insufficiency and the latter may not occur until near death.

Summary

A case of adreno-cortical hypofunction secondary to metastatic carcinoma of the lung is described. The diagnosis was confirmed antemortem by an ACTH stimulation test and plasma cortisol determinations. Autopsy findings confirmed neoplastic replacement of the adrenal glands.

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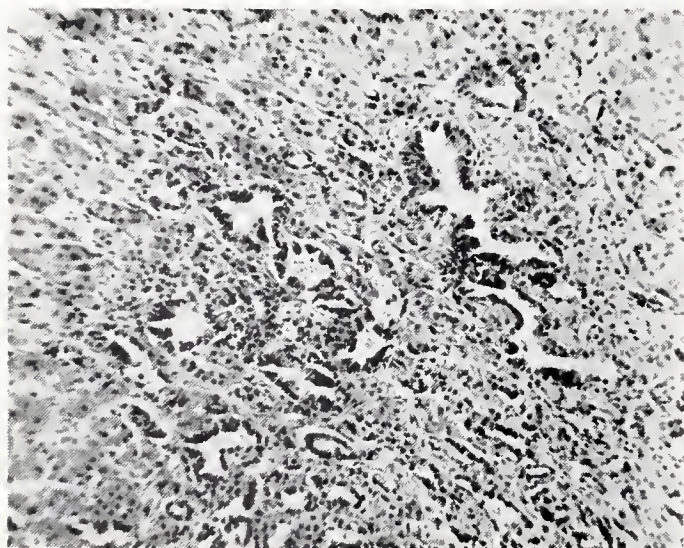


FIGURE 2
A typical microscopic section showing replacement of the adrenal with an infiltrating adenocarcinoma.

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Antibacterial Antibodies in Rectal and Colonic Mucosa in Ulcerative Colitis

E. Monteiro et al (Central Middlesex Hosp, London)

Lancet 1:249-251 (Feb 6) 1971

Tests with an immunofluorescence technique were made for the presence in rectal and colonic mucosa of antibody reacting with fecal bacteria. Mucosa from 11 patients with ulcerative colitis had antibody reacting with anaerobic but not aerobic bacteria from their own feces as well as anaerobic bacteria from other patients with colitis. Mucosa from eight non-colitic patients, with one doubtful exception, did not contain demonstrable antibody against their own fecal bacteria but sometimes reacted with fecal anaerobes from colitic patients. The mucosal antibody from colitic patients also sometimes reacted with fecal anaerobes from some non-colitic patients. Although the mucosal antibody was predominantly of the IgG class, it was not derived from serum, since serum antibodies reacted with aerobic and not with anaerobic fecal bacteria.

Congenital Pulmonary Lymphangiectasis

J. A. Noonan, L. R. Walters, and J. T. Reeves (Univ of Kentucky Medical Center, Lexington 40506)

Amer J Dis Child 120:314-319 (Oct) 1970

Three patients with pulmonary lymphangiectasis were studied by cardiac catheterization. All had evidence of alveolar hypoventilation and pulmonary hypertension. Postmortem injection studies of the abnormal lungs showed greatly dilated and intracommunicating pleural, interlobular, and perivascular lymphatics. Two of the patients had obstructed total anomalous pulmonary venous return, while the third had a ventricular septal defect. In the latter, a premortem diagnosis of pulmonary lymphangiectasis was made at 4 months of age by lung biopsy. A review of the literature indicates that pulmonary lymphangiectasis can occur in three forms: as part of generalized lymphangiectasis, secondary to pulmonary venous obstruction, and as a primary developmental defect of the lung. The clinical picture and prognosis vary with the type.

Intrathecal Alcohol and Pain

Stevenson Flanigan, M.D.* and Joe Filbeck, M.A.**

Roughly half the way back in recorded scientific literature Galen expressed belief that motor and sensory nerve elements were separate at the spinal axis. It was in the early part of the last century that Magendie identified the posterior roots of the spinal cord as the avenue through which the sensation of pain was appreciated. In the latter part of that century, at a time when the surgical application of anatomical information was burgeoning, the division of those roots for the relief of pain was initiated. In the intervening years of the Civil War, Weir Mitchell was first to ponder the sensitization of the central mechanisms of perception which seem to accompany injuries to peripheral nerves.

Early in this century Henry Head defined those areas of hypersensitization on the surface of the body which are also those cutaneous zones to which visceral pain may be referred. Mackenzie proposed that this might be a state of increased irritability of gray matter of the cord, being sensitized in that segmental distribution. More recently Melzack and Wall have theorized a comparable concept.⁴ Noordenbos prefers a multisynaptic model for facilitation and inhibition in the spinal propagation of afferent impulses.⁶

For relief from pain, then, some general suppression of the afferent barrage would seem an applicable approach. In our times Dr. White has suggested that the ultimate in the relief of pain will be one with which the other sensory modalities will remain serviceable. The use of intrathecal alcohol as a device with which to attack problems of pain was introduced over fifty years ago.² During the third decade of this century Stern⁷ and Adson,¹ among others, championed the use of the technique with some recognition of the limitations and complications. The predictability of result remained uncertain. In 1935 Naffziger expressed concern that the spinal roots subjected to alcohol experimentally showed a diffuse and indiscriminate effect on all nerve fibers. This raised the question that an undesirable endpoint might occur as a consequence of that effect on the motor roots as well as

afferent fibers other than those presumably conducting pain. Stewart and Lourie confirmed this pathological information in 1963.⁸ The changes produced by intrathecal alcohol in that study were used as one of the controls for comparison with the effects of intrathecal phenol.

Still phenol, and in earlier years alcohol, has provided a satisfactory solution to some pain problems. At first glance the resolution of pain with the preservation of virtually all other sensory modalities and motor functions would seem the ultimate. The frequency with which the procedure provides adequate and lasting relief has, however, been limited. In the face of pre-existing motor deficit, the loss of motor function can prove disabling, especially with neurogenic bladder dysfunction. The prospects of a more favorable response with application of larger amounts in the thoracic and cervical portions of the spinal canal was inviting. Results have been gratifying occasionally. The patients reviewed for this presentation were studied in an attempt to identify that type of problem for which this procedure might be most applicable.

Of 67 patients subjected to intrathecal alcohol injections for the relief of pain, 60 provided adequate follow-up information. The pain was related to a neoplastic lesion in 45% of the patients treated. Among those with pain unrelated to neoplasm, the diagnosis included radiculitis, trigeminal neuralgia, intercostal myofasciitis, the shoulder/hand syndrome and causalgia, and visceral pain of ischemic and inflammatory origin.

In most instances the pain was described as aching in character. There were 24 patients who also complained of dysesthesia of paresthetic or burning nature. Three-quarters of these dysesthesia problems were in patients with non-neoplastic disorders. In 30 patients the pain was of lumbosacral distribution, in 18 thoracic, and in 13 cervical. Of 6 intracranial injections, 4 were made around the roots of the gasserian ganglion in Meckel's cave and two were made in the posterior fossa by way of the foramen magnum. In most instances the quantity of alcohol used in the lumbosacral area was less than 1 cc. Except in patients already requiring an indwell-

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ing Foley catheter the lateral position and the smaller quantities of alcohol were preferred. In the thoracic and cervical portions of the spinal canal larger quantities of alcohol, two to four cubic centimeters, were used. Intracranially 0.5 cc's injections were used in the Meckel's cave and 1 cc. was used on each occasion when the alcohol was introduced into the posterior fossa through the foramen magnum.

The technique (except in the case of Meckel's cave) involves a midline puncture of the subarachnoid passageways with an 18 gauge spinal puncture needle. The needle is introduced between the spinous processes at the segmental interspace corresponding to the distribution in which the maximum degree of pain has been reported (except for the sacral segments where the lumbosacral interspace is utilized). The patient is positioned in the lateral decubitus or the anterior oblique, with the painful side uppermost. A lateral flexion of the spinal axis is also imposed and again with an attempt to make the segmental level to be effected uppermost. The position is maintained with the alcohol in place for 30 minutes. The patient is then turned supine for an hour. Following that, he is permitted freedom of activity.

With the introduction of the needle, deviation of the point of the needle from the midline or penetration of the spinal cord can be identified by the report of the sensory experiences of the patient. There should be a free flow of cerebrospinal fluid through the needle before an introduction of the alcohol is undertaken. Fluid sampling has been limited to one to two cubic centimeters. With the injection of 0.1 cc. of the absolute alcohol the occasion of deep pain localized in the midline back is indicative of an extradural injection and the procedure should be discontinued. With appropriate placement of the needle and with the material injected in the subarachnoid passageways the patient will very shortly recognize a radiation of paresthesias or a sensation of warmth through the distribution of the nerve root upon which the greatest amount of effect will occur. If this is not the distribution through which the maximum effect is desired, a second needle is introduced at the next appropriate interspace (leaving the first needle in place).

As the full quantity of absolute alcohol is introduced the patient will describe a radiating

paresthetic discomfort of increasing intensity, and it is at times necessary to halt the injection temporarily to permit the superimposition of the anesthesia effect of the alcohol. The material is introduced slowly to minimize the mixing with the cerebrospinal fluid, anticipating that the hypobaric nature will establish a layer at that uppermost portion of the subarachnoid sac. With the miscible nature of alcohol, it is probable that mixing to a concentration of 70% or less occurs throughout the separate layer within a few minutes.

Following the radiation of paresthesias the patient will quickly recognize the onset of an anesthetic "numbness" through the distribution of the nerve roots in the immediate vicinity of the injection. The pain of pinprick is abolished in that area and there is a diminution in the perception of touch, although it is not abolished. Position sense is likewise partially obtunded. The patient often describes a sense of weakness when the block is affecting an extremity. This is not readily apparent on motor testing and reflex motor functions usually remain intact. Nerve conduction studies (under the influence of intrathecal phenol) by Nathan and Sears,⁵ and Iggo and Walsh³ have indicated a selective suppression in small unmyelinated fibers and those with minimal myelination in this period of acute effect.

During this "anesthetic" effect, the pain with which the patient complained is abolished much as though spinal anesthesia were covering that segmental distribution. Hyperpathia is resolved, and the patient will permit manipulation of a site that was previously painful with pressure or movement.

In the first five minutes after the introduction of the alcohol the area affected by the "numbness" usually spreads to several adjacent root distributions, depending on the amount of alcohol injected and the degree to which the area to be made effected has been positioned uppermost. The broader spread of sensory change commences contracting at 15 minutes and by the time the patient is turned supine, at 30 minutes, the area of more dense effect is usually limited to two or three segments surrounding the site of needle puncture. In the case of more intense pain problems, aggravation of the pain with manipulation may also return at that time. When this is the case, the following day often

brings a return of the patient's complaint to the same or even greater extent than that which had been manifest prior to the block. In any event there usually remains at least a monosegmental "numbness." This is often difficult to identify even with the prick of a pin.

Results

There was a complete relief of the pain during the acute "anesthetic" effect in 44 (approximately 75%) of the 60 patients. Another 14 reported partial relief during that initial effect, making a total of 58 of the 60 with favorable response. In 29 of the patients the relief was sustained beyond the first day or two. Among this group appreciating significant benefit, only 20 reported an effect lasting more than six weeks. Those other nine lost the relief at varying intervals of one to six weeks, with roughly an even distribution. In two-thirds of the patients reporting relief for six weeks or more, the lesion for which the block was performed was non-neoplastic. In some instances there was also lasting amelioration from the dysesthesias.

Upon testing a significant sensory deprivation occurred in 17 patients. In only 8 of those was relief reported lasting. In only 5 of those 17 was there a pre-existing sensory deficit. Among those that acquired this sensory loss 8 (three-quarters) reported relief lasting beyond six weeks. Eight patients suffered an alteration in motor function as a consequence of the intrathecal alcohol block. In no instance was it a major disability.

In the period following one or more intrathecal alcohol blocks, 33 of the patients still required narcotics for pain management. Only 12 patients demonstrated the anticipated transition from pre-block use of narcotics to post-block discharge without medication. Fourteen patients underwent more than one alcohol block; 13 subsequently were subjected to posterior rhizotomies and 8 had cordotomies.

Discussion

There was limited pathological material available for examination. As Stewart and Lourie commented, the clinical circumstances make it difficult to isolate the effect of the therapeutic procedure from the potential of an influence that the pathologic process may impose upon the nerve elements. In most instances, the secondary operative procedure did occur rather shortly after the inadequate intrathecal alcohol block.

Under circumstances in which the posterior roots in question were available, as in the case of posterior rhizotomies, there were pathological changes. Myelin stains and silver stains for axons both demonstrated fragmentation and degeneration which could not be appreciated on the routine hematoxylin and eosin stains. The latter technique did show an infiltration of inflammatory cells in the interneurium. All changes were diffuse throughout the root bundles. In the myelin stains it appears as though few elements escaped alteration.

In a patient with a Pancoast tumor, the posterior rootlets from C-6 through T-2 were available for examination. This occurred with operative intervention two weeks following the intrathecal introduction of alcohol in the amount of 2 cc's at the cervicothoracic junction. The block had been partially effective. The dysesthesia to tactile stimulation and hyperalgesia along the ulnar distribution of the forearm were abolished. The range of movement permitted on manipulation at the elbow was increased; however, the patient still reacted with considerable pain on massage of the distal medial posterior aspect of the arm. His requirement for narcotic coverage was not diminished with the block. The material available for pathological examination showed degenerative changes throughout the 7th and 8th cervical roots and the 1st thoracic root. None of these changes were evident in the 6th cervical nor the 2nd thoracic roots.

No one of the specimens of the spinal tissue examined microscopically showed the massive fibrosis and cicatricial reaction commonly seen with the clinical entity of arachnoiditis. Grossly at operation the subarachnoid passageways were equally as voluminous as would have been expected. Some white opacification of the arachnoidal membrane was apparent at times but there was no gross thickening. Spinal fluid protein examinations done on short term follow-up basis under varying circumstances demonstrated elevations of 90 mgm% to 360 mgm% in those patients with previously recorded normal spinal fluid protein levels. Pleocytosis was usually apparent and ranged up to 200 cells, principally polymorphonuclear.

Electronmicroscopy may provide some further insight into the effects on the myelin and on the axon cylinders. Thus far no specimen suitable

for examination of the spinal cord by conventional or other means has been available. Electromyographic and nerve conduction studies surrounding and during the time of the block and nerve root conduction studies during subsequent operative intervention may further elucidate the nature of the alcohol blockade.

Conclusion

There is little to help in the identification of the patient who will experience reward with the intrathecal alcohol procedure. There is little to contraindicate a trial use. It would appear that those individuals with lesser degrees of discomfort and to some extent those with static condition are more appropriate candidates. Problems of pain in terminal disease offer another opportunity to apply this type of lesser procedure when lasting effect is less crucial.

From the records, there were eight patients who were identified with a significant degree of emotional dependence upon the pain with which they complained. Interestingly, half of them were listed among those requiring relief lasting more than six weeks.

With less well localized problems of pain, such as those of visceral origin, the diagnostic value of the procedure has merit. A block accurately effective in the area of the pain helps in the selection of the roots for a posterior rhizotomy. A missed localization can offer redirection. There is another advantage in that it can be employed throughout the thoracic and cervical segments where there is a limitation in the applicability of spinal anesthesia. In half of the instances the

procedure will be of no value in pain relief and the patient and the physician must be prepared to accept this.

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ABSTRACT

Key words: pain, intrathecal alcohol, diagnostic block, technique of spinal injection.

Pain which is lesser, potentially transient, migratory, terminal and/or accentuated in emotional instability can be managed at times with intrathecal alcohol injections. The simplicity of the "block" is often attractive to the individual anxious to avoid operative intervention and the effect of the "block" can provide diagnostic information. The intrathecal injection of alcohol is not without potential morbidity of motor impairment. The technique is applicable throughout the spinal axis, not confined to the caudal sac.



Biochemical Composition of Human Pulmonary Washings

J. Ramirez-R et al (S. D. Lee, 1055 Laidlaw Ave, Cincinnati 45237)

Arch Intern Med 127:395-400 (March) 1971

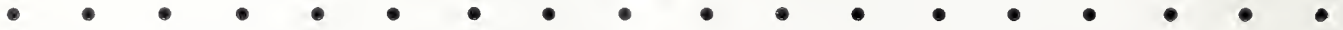
Lipid composition and protein content of 99 pulmonary washings from patients with asthmas, chronic bronchitis, pulmonary adenomatosis, desquamative interstitial pneumonia, and pulmonary alveolar proteinosis were studied. Phospholipid represented 31.1% to 47.0% of recovered lipid in patients with asthma and bronchitis. Patients with alveolar proteinosis had the highest

lipid (mean value 129.4 mg/100 ml effluent) of which 56% was phospholipid. One patient with pulmonary adenomatosis had 42.4% phospholipid and one with desquamative interstitial pneumonia had 26%. Palmitic acid comprised 78% of the total fatty acids of phosphatidylcholine obtained from patients with alveolar proteinosis but only 62% in others. Repeated lung washings in alveolar proteinosis patients showed progressive decrease in lipid and protein concentration. Lipid and protein composition of human lung washings tends to reflect the nature of the underlying disease.



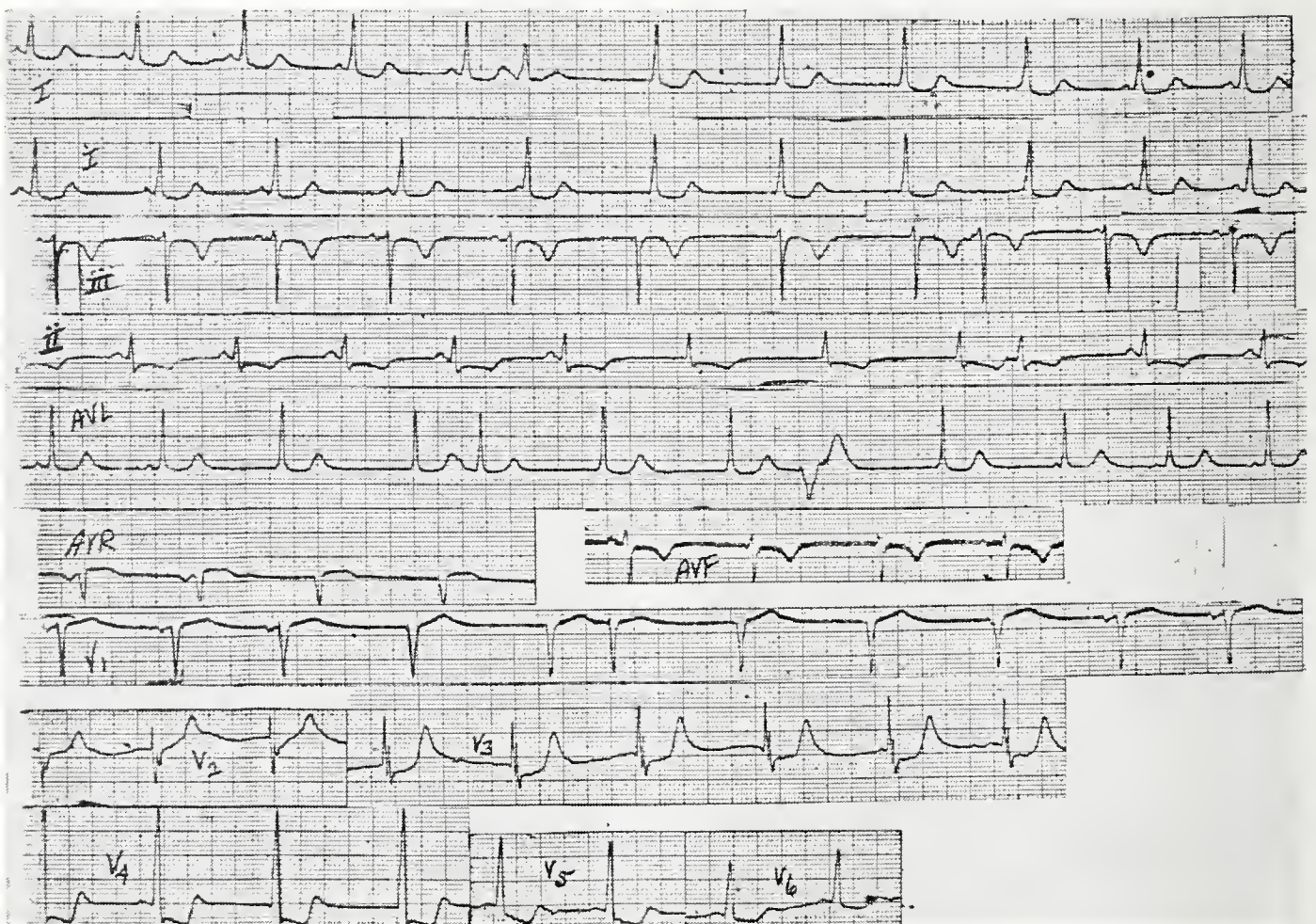
ELECTROCARDIOGRAM

OF THE MONTH



64-year-old caucasian male with previous history of two myocardial infarctions; admitted at time of this tracing with crushing chest pain. Patient is normotensive, on no digitalis or quinidine. His serum electrolytes are normal.

See Answer on Page 195



The Department of Cardiology, University of Arkansas Medical Center
John E. Douglas, M.D., Fellow Cardiology



Cancer Registry Services in Arkansas

Progress in the delivery of health care depends upon the coordination of three prime medical activities: service, education and research. However, service to the cancer patient includes more than early diagnosis and definitive treatment. After treatment, periodic follow-up examinations throughout life are of paramount importance. This is necessary for early detection and treatment of any recurrence of the previously treated cancer, also for the early diagnosis of a possible new primary cancer at another site.

The Arkansas cancer program includes the three types of cancer registries recognized by the American College of Surgeons: the single hospital-based registry, the community or area registry, and the state registry. They facilitate follow-up or follow-through procedures for the cancer patient.

Hospital Cancer Registries, including records of all in-patients and out-patients with malignant neoplasms, are located at 9 general hospitals, designated on the accompanying map of Arkansas.

Two *Area Cancer Registries*, located at Fort Smith and Fayetteville, cover 11 Arkansas counties and 5 Oklahoma counties, representing 19 additional hospitals and/or clinics.

Continuity of care through follow-up at regular intervals is the primary function of these registries. Their operation will continue regardless of factors such as the death or retirement of a physician, or change of residence of either the patient or physician.

Registrars or secretaries are encouraged to prepare studies from Cancer Registries for hospital staffs to use in clinical conferences and for

evaluation of patient treatment care, status of survival and end results.

Registry procedures conform to the Arkansas Handbook, designed to meet American College of Surgeons standards and approval.

Public health nurses in Arkansas locate patients with whom the Hospital Cancer Registry has lost contact. And with the approval of the patient's physician, public health nurses make nursing visits to cancer patients.

The *Arkansas State Cancer Registry*, housed in the Arkansas State Department of Health, and a part of the Cancer Section, Division of Chronic Disease Control, admits Registry Abstracts on cancer patients and follow-up information at least once a year from the 9 hospital and 2 area registries. These data are reviewed for accuracy and completeness in order that uniform and accurate statistics are available.

As of June 30, 1971, the State Registry had received a total of 37,590 abstracts from hospital cancer registries, representing cancer cases each year from 1935-1971.

Sufficient data is being accumulated to make statistically significant analysis for certain population-based conclusions about the epidemiologic aspects of cancer in Arkansas.

The Arkansas Cancer Registry program began in 1947 with the establishment of tumor clinics for medically indigent cancer patients. Emphasis was put on hospital-wide cancer registries in 1961. A long-range goal is cancer registry coverage in all Arkansas hospitals with 100 beds and over. Funding for computerization of available data with feedback printouts to doctors, hospitals and related health agencies is a present goal.

CANCER REGISTRY PROGRAM
Cancer Section
Division of Chronic Disease Control
Arkansas State Department of Health
CANCER REGISTRIES



1. UNIVERSITY HOSPITAL – Little Rock
2. ST. VINCENT INFIRMARY – Little Rock
3. ARKANSAS BAPTIST MEDICAL CENTER – Little Rock
4. JEFFERSON-DAVIS HOSPITAL – Pine Bluff
5. ST. MICHAEL HOSPITAL – Texarkana
6. WARNER BROWN HOSPITAL – El Dorado
7. UNION MEMORIAL HOSPITAL – El Dorado
8. ST. BERNARD'S HOSPITAL – Jonesboro
9. BOONE COUNTY HOSPITAL – Harrison

AREA CANCER REGISTRIES

10. ST. EDWARD MERCY HOSPITAL – Fort Smith
11. WASHINGTON GENERAL HOSPITAL – Fayetteville
12. ARKANSAS STATE CANCER REGISTRY
 Arkansas State Department of Health – Little Rock



EDITORIAL

The Poor Reader

F. Hampton Roy, M.D., Frederick T. Fraunfelder, M.D. and John E. Peters, M.D.

The term *dyslexia* refers to various degrees of inability to read or gather information from printed symbols occurring in individuals who otherwise have normal intelligence. Morgan, in England, first described the condition as "word-blindness" in the 1890's. Early in the 20th century James Hinshelwood, another English physician, wrote:

"It is a matter of highest importance to recognize the cause and the true nature of this difficulty (dyslexia) in learning to read which is experienced by these children, otherwise they may be harshly treated as imbeciles or incorrigibles and either neglected or punished for a defect for which they are in no way responsible."¹

Incidence

Eight million Americans have or have had a significantly impaired reading ability due to deviations or dysfunctions of the central nervous system. The frequency of such reading problems is estimated as high as 8 to 10% of all school children in grades 1 through 12.² Ninety-nine percent of first grade and ninety percent of second grade failures are due to failure in learning to read. Up to 75% of the poor readers become emotionally disturbed, probably as a result of their disability. It is a striking fact that 75% of dyslexia cases are boys. Reading problems constitute a major contributing cause of delinquency in youths 6-19 years old.³

In Japan there is said to be little or no dyslexia. This may be due to the fact that it isn't recognized or that the children are written off as dullards or sent to trade schools. But there

also seems to be a lower incidence of dyslexia among Mediterranean peoples and Jews. With regard to the incidence in Japan, it may be due in some measure to the nature of the written Japanese. Part of their written language is based on Chinese pictographs and part on a system of phonetic symbols in which one sound is represented by one and only one symbol. In English spelling, one symbol often has many different sounds. For example, the letter "a" has six different sounds:

ā â â ă ä á

Thus it is very confusing for all beginners, who must remember what sound to give the letter "a" in each different word in order to recognize it and to interpret the meaning of the sentence in which it occurs. Children who are deficient in visual-auditory memory linkages are truly crippled with regard to the task of learning to read English. The problem is similar in Danish. It is noteworthy that the earlier leading work on developmental dyslexia was done in England and Denmark.^{4,5}

Types of Dyslexia

There are a number of related terms such as specific learning disability, developmental dyslexia, primary reading disability, minimal cerebral dysfunction, and minimal brain dysfunction.^{6,7} The pure type often referred to as primary reading disability or developmental dyslexia, is not accompanied by classical, localizing neurological signs; however, one or two "soft" neurological signs may be present. For example, confused directionality (e.g., can't remember up from down or right from left in a visual motor task) is commonly found in these pure cases from about age six to twelve. However, most

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cases of dyslexia are not of the pure type; rather, it is associated with an assortment of "soft" neurological signs and behavioral symptoms such as impairment in gross or fine motor performance, poor ocular tracking, short attention span, impulsivity, and more or less degree of hyperactivity. It is for this reason that different specialties have developed different labels for these children.

The primary or pure type is thought to be due solely to a genetic deviation⁸ and the mixed types are thought to be secondary to minor brain injury in inhibitory cell circuits. The latter has been found to be associated statistically with the complications of pregnancy and birth.⁹ Some research has linked reading disorders with childhood virus diseases occurring before the age of two and a half.¹⁰ Presumably this would be due to subclinical encephalitis occurring in the period which is critical for the development of cell symptoms which support language functions.

There is still another group of disabled readers, not properly referred to as dyslexic, in which the etiology is attributed to cultural deprivation. Still other reading problems may be due to complex emotional problems or to poor vision.

Diagnosis and Evaluation

The need for an evaluation may become apparent to the parent, teacher, or to the physician. An alert teacher may be the first to notice an immaturity in the child, often referred to as developmental lag, which is often seen in young dyslexics. By the second or third grade the teacher is usually sure that her pupil has dyslexia, or as it is better known in Arkansas schools, specific learning disability.

The child should first be sent for a physical evaluation. The pediatrician or family physician is best equipped to evaluate the general health of the child. Sometimes in the case of very restless or hyperactive dyslexics the short attention span can be helped by the use of a CNS stimulant.^{11-12,13} This is because of a well-known paradoxical effect which certain stimulants have on hyperactivity in children. However, such treatment should not be used unless the physician is prepared to study the literature on the subject, and most important, see the child often enough to determine the correct dosage and to observe whether improvement or undesirable side effects have occurred.

The neurologist is often called upon to search for minor brain damage; however, some psychiatrists are also well versed in this area. Increased frequency of abnormal spikes on the EEG has been reported in children with dyslexia, but no regular or dependable relationship has been found between any particular EEG pattern and dyslexia or hyperactivity.

The psychiatrist is interested in emotional problems experienced by the patient as they relate to the pupil-pupil, pupil-parent, and pupil-teacher relationships. The psychologist renders I.Q. tests, as well as reading assessment tests, and may uncover other factors which play a role in the problem.

The ophthalmologist is asked to check for refractive errors, eye dominance, and the binocular vision status. Some ophthalmologists place a great deal of emphasis upon mixed dominance (e.g.—right handed dominant and left eye dominant) and may try occlusion of one eye for periods up to nine months in an effort to change dominance to the opposite eye.¹⁴ However, the vast majority of ophthalmologists feel that mixed dominance occurs both in good readers as well as in dyslexic children, and that attempting to change this dominance pattern as a method of treatment for dyslexia is not neurologically sound.¹⁵

After all physical factors are eliminated, the private or public school reading teacher may very well conduct his own inventory of the problem. Some schools have psychologists or educational diagnosticians who can pinpoint the underlying language dysfunction and so advise the regular teacher how to proceed to help the child.

Treatment

Treatment is often directed, of course, to any defect that has been found up to this point, but usually the physical findings will be either within normal limits or non-contributory. Once all other factors are eliminated in the evaluation, tutorial and specialized education becomes the "hallmark" of treatment.¹⁶ Various educational therapists have devised different types of therapy which are frequently named after the originator. The therapist's attitudes are probably more important than the specific type of remedial reading techniques used. A certain percentage improve with time, but it is important to do

everything possible to alleviate the child's frustrations during his formative school years, and to avoid emotional maladjustments which may later impair the individual's effectiveness in earning a living and in relating to others.

It is becoming more and more urgent, as these children are recognized and diagnosed to provide a Resource Room in each elementary and junior high school, staffed with a trained teacher. Where a school superintendent is unaware of this need, a physician can often point out that he has encountered cases of this sort among his patients who are pupils in the superintendent's school system. School board members should also be made aware of the problem. They especially need to know that having dyslexia is not the same thing as being mentally retarded. If no more is done than to recognize the dyslexic child *as such*, reduce the pressure on him, and to provide him with other material he can learn, that will be a significant contribution to his future social and personal adjustment. Given specialized instruction, or protected from undue pressure and ridicule, many of these dyslexic children have grown up to be prosperous or outstanding citizens.

A word of caution is indicated at this point in that there are many individuals throughout the country who claim to have a complete answer to reading problems, but who actually prey upon the unfortunate parents who are "taken in," promised much, charged a high fee, and given nothing in return. An example is the group that advocate "creeping and crawling" (misabeled neurological patterning) as a cure for academic learning problems. If these children are not referred to a competent and thorough diagnostic service, they may be subjected to a great deal of "treatment" for only one facet of their overall problem, which may have little or no effect on the academic problem. A learning disorder such as dyslexia is composed of various complex parts, and the organs of seeing and hearing, as such, are not central to the problem.

The Child Study Center at the University of Arkansas Medical Center provides a thorough diagnostic work-up of children with dyslexia. The following are the procedures which are most often utilized:

1. Personal and family history form, school history form and a form filled in by the child's doctor.

2. Interview of parents.
3. Wechsler Intelligence Scale for Children.
4. Bender Gestalt.
5. Clinical reading test.
6. Illinois Test of Psycholinguistic Abilities.
7. An individualized inventory of reading and writing skills.
8. Integrative neurological examination.

There are several Regional Educational Centers and Mental Health Centers in Arkansas which can either make the diagnosis or provide the initial testing which can lead to the diagnosis. Especially is it obligatory upon the Regional Educational Centers to develop the expertise to recognize and guide the local school systems in handling dyslexia.

Summary

Much research is yet needed in regard to dyslexia. Reading problems are widely prevalent. The child needs a complete medical and ocular evaluation and in some cases the consultation of a neurologist, psychiatrist, reading specialist, audiologist, and social worker. Eye exercises, coordination exercises, special bifocals and mixed dominance therapy should be strongly discouraged. The greatest help to dyslexia is a full evaluation, then with a strong impetus on local school districts to develop Resource Rooms, special curricula and teaching techniques for the "slow reader."

Every physician should be alert as to his responsibility and to realize his opportunity to aid in a very important part of a child's life—learning to read. We should not shirk this responsibility to make this help available.

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PERSONAL AND NEWS ITEMS

Dr. Gordon Reports on Study

Dr. Vida H. Gordon, Associate Professor of Pediatrics and Microbiology at the University of Arkansas Medical Center, recently presented a paper at the 13th International Congress of Pediatrics at Vienna, Austria.

Dr. Gordon and her associates have conducted a four-year study of the use of a ragweed extract in treating allergies. Among those working with Dr. Gordon on the study was Dr. Kelsy Caplinger, a pediatric allergist on the Medical School's voluntary faculty.

Physician Elected to Board

Dr. James D. Armstrong of Ashdown was recently elected to the Board of Directors of the Bank of Ashdown.

Dr. Smith Gets New Associate

Dr. Floyd Smith has announced that Dr. Curtis Stover joined him in his practice at the Smith Clinic in Trumann on November 1st.

Physician Addresses PTA

Dr. Charles H. Floyd, a pediatrician in Fort Smith, spoke at the September meeting of the Albert Pike School Parent Teacher Association. Dr. Floyd spoke on the subject of "Why Children Fail in School."

RMP Consultant Visits Harrison

Dr. G. Doyné Williams, Associate Professor of Medicine at the University of Arkansas Medical Center, met with physicians in the Harrison area in September. Dr. Williams is one of the consultants in the Continuing Education Program for Physicians, a project of the Medical Center funded by the Arkansas Regional Medical Program.

Physicians' Articles Published

An article entitled "Psychoses in the General Hospital" by Dr. Fred O. Henker, III, of Little Rock, was published in the October issue of the *Southern Medical Journal*. An article by Dr. G. Thomas Jansen, et al., entitled "The Brown Recluse Spider Bite: Controlled Evaluation of Treatment Using the White Rabbit as an Animal Model" also appeared in the October issue of that publication.

Dr. Caplinger Guest Speaker

Dr. Kelsy Caplinger of Little Rock was the guest speaker at the annual meeting of the Dallas County Hospital Auxiliary.

Society Committee Rewards 4-H Club Winners

The first Arkansas 4-H O-Rama was held on the campus of the State College of Arkansas at Conway in August. About 800 boys and girls

competed in 26 different I-H activities. Winners in the "Health" category received gold watches from the Committee on Rural Health of the Arkansas Medical Society.



Dr. Ben N. Saltzman, Chairman of the Society's Rural Health Committee, presented gold watches to Bobby Lyons of Humphrey for "Drug Abuse" and to Patty Watson of Wesley for "Smoking and Health."

Physicians Named Diplomates

The following physicians have been named Charter Diplomates of the American Board of Family Practice: Dr. Charles Rodney Baker and Dr. John W. Vinzant of Fayetteville; Dr. Herman D. Luck, Arkadelphia; Dr. Wayne Lazenby and Dr. Guy U. Robinson of Dumas; Dr. Robert A. Etherington, Eureka Springs; Dr. Robert Nunnally, Gurdon; Dr. James R. Weber, Jacksonville; Dr. A. Meryl Grasse, Calico Rock.

Dr. James E. Haynes of Fayetteville has been named a Diplomate of the American Board of Pediatrics.

Dr. Wilkins Guest Speaker

Dr. Charles J. Wilkins, Jr., of Russellville, was the guest speaker at the October 28th meeting of the Franklin County Extension Homemakers Council. Dr. Wilkins spoke on "The Art of Visiting the Sick."

Physician Joins Hospital Staff

Dr. Willis M. Stevens, Jr., who recently completed a two year residency in anesthesiology at the University of Arkansas School of Medicine, has joined the staff of Warner Brown Hospital in El Dorado. Dr. Stevens had formerly been in the general practice of medicine in El Dorado for six years.

Dr. Clardy Participates in Workshop

Dr. Edgar K. Clardy of Hot Springs was among the participants in the Second National Work-

shop Panel on Upper-Extremity Orthotics. The meeting, which was held in Hot Springs in October, was sponsored by the Hot Springs Rehabilitation Center and the Leo N. Levi National Arthritis Hospital.

Physician Given Honor

Dr. J. J. Whittington, III, was recently accepted into the American College of Emergency Physicians. He is one of only five such physicians in Arkansas. Dr. Whittington, who formerly practiced in Walnut Ridge, is now Director of Emergency Services at St. Bernard's Hospital in Jonesboro.

Anecdote from the Past

For six months during World War I, Dr. R. M. Blakely had two hundred wounded American soldiers under his care at a hospital in Paris, France. He lost only one patient during the six months. When the Paris Hospital was closed, he was one of fifteen doctors to serve six months in Serbia. Dr. Blakely received information through an interpreter that he was to be decorated for his service at Serbia. Feeling that the work of four nurses under his supervision was largely responsible for the recognition to be given him, Dr. Blakely refused to accept the decoration unless the nurses were similarly honored. All five were decorated; Dr. Blakely was the only American physician to be given the decoration.

Dr. Blakely began the practice of medicine in Little Rock in 1920 and continued to be active until 1965. He was forced to give up active practice at that time because of injuries received at the hands of a hold-up man during an office robbery. He celebrated his 86th birthday on November 12th.

ANSWER—Electrocardiogram of the Month

These tracings demonstrate intermittent A-V dissociation with nodal escape rhythms. Occasional premature atrial and ventricular depolarizations are also present. The premature beat in Lead I, occurring after the 5th beat, probably represents an atrial echo with ventricular conduction. Although this patient had a history of two previous infarctions there are no definite ECG changes of old infarction. The ST segments are decidedly abnormal, and in a patient on digitalis, they probably reflect Left Ventricular ischemia. Notching as seen in the QRS complexes in V2 and V3 has been suggested by some investigators as a reflection of infarction. Although they may indicate such in this patient, such notching is not at all a reliable diagnostic finding.

MEDICINE IN THE



THE MONTH IN WASHINGTON

President Nixon's sweeping economic proposals have pushed aside chances for Congressional hearings on national health insurance until after the first of the year. Four of the Nixon economic proposals require legislative action and this will keep the House Ways and Means Committee busy at least through September and probably longer. Coupled with the Congress' announced intention on adjourning in late October or early November, this could delay Congressional action on national health insurance until late 1972, or possibly until the convening of a new Congress in 1973.

While the House Ways and Means Committee considers the Nixon economic proposals the Senate Finance Committee will consider the Social Security Amendments (H.R. 1) already passed by the House. Chances are that the Senate will delete the Administration's welfare proposals (Family Assistance Plan) from H.R. 1 and add Senator Wallace F. Bennett's (R.-Utah) Professional Standards Review Organization proposal of last year. Enactment of this legislation prior to adjournment is considered likely.

Also considered likely to be enacted prior to adjournment are the health manpower bills presently in conference. This legislation would authorize an estimated \$3.3 billion in aid to health profession students and their schools in the next three years and provide facilities and programs to close the manpower shortages in the health professions within seven years.

* * *

A Health, Education and Welfare Commission has been formed to study the entire range of medical malpractice problems. The commission will conduct a series of public hearings on the fundamental causes behind the rising number of malpractice claims and their effects on the health care system, the legal system, the insurance industry, and the general public.

In announcing the commission's membership HEW Secretary Elliot Richardson said, "I feel confident this outstanding group will make a major contribution towards solving one of the nation's most vexing health care problems."

Headed by Attorney Wendell Freeland of Pittsburgh, Pennsylvania, the newly created secretary's Commission on Medical Malpractice will represent health care providers and institutions, the legal profession, the insurance industry and the general public. Acting as additional consultants to the commission will be advisory panels comprised of experts in the disciplines directly concerned.

The commission will compile statistical data and other relevant information in a series of studies conducted by HEW primarily through contracts with non-government research organizations and universities.

Eli P. Bernzweig, HEW's specialist in the medical malpractice area, has been named executive director of the commission staff. Loren F. Taylor, M.D., professor of Anesthesiology at the University of Kansas Medical Center, has been named Deputy Executive Director.

The commission will make a final report with recommendations to the HEW Secretary.

Charles Hoffman, M.D., president-elect of the American Medical Association and member of the AMA Board of Trustees, is one of the commission members. Others are:

Vincent H. Cohen, Hogan and Hartson, Washington, D. C.; Bernard J. Conway, Assistant Executive Director, American Dental Association; Mrs. Helen Creighton, R.N., LL.D., Prof. of Nursing, University of Wisc., Milwaukee; William J. Curran, LL.D., S.M. Hygiene, Prof. of Legal Medicine, Harvard Medical School; Wendell Freeland, Pittsburgh; Howard Hassard, Hassard, Bonnington, Rogers & Huber, San Francisco; Paul B. Jarrett, M.D., Phoenix, Ariz.; Henry T. Kramer, President, N. American Re-

insurance Corp.; John E. Linster, Senior Vice President, Employers Insurance of Wausau, Wausau, Wisc.; James E. Ludlam, Musick, Peeler & Garrett, Los Angeles; Richard M. Markus, Sindell, Sindell, Bourne, Markus, Stern and Spero, Cleveland; Edward H. Morgan, Asst. Secy., Casualty Underwriting—Dept. CH, Aetna Casualty and Surety Company, Hartford, Conn.; George W. Northrup, DO, Editor, American Osteopathic Assn. Journal, Livingston, N. J.; Miss Audra Marie Pambrun, R.N., Director, Community Health Aides, Blackfee Community Action Program, Browning, Mont.; Mrs. Esther G. Schiff, Legal Counsel, Mt. Sinai Hospital of Greater Miami, Miami Beach, Fla.; Monroe E. Trout, M.D., JD, New Canaan, Conn.; and Carl E. Wasmuth, M.D., JD, Chairman, Board of Governors, The Cleveland Clinic Foundation, Cleveland, Ohio.

* * *

The President of the American Medical Association, Wesley W. Hall, M.D., recently praised the nation's press for a "growing sophistication" in dealing with health care issues.

Speaking before an audience of newsmen, federal officials, and health organization representatives at the National Press Club, Washington, D. C., Dr. Hall said "This is a most healthy development." Many news stories now analyze the issues raised and challenge and dispute assumptions rather than follow a "hackneyed theme," he said.

"If the people are fully informed, we doctors of America will put our trust in their ability to make the right decisions. . . . I find it encouraging that the press is approaching this subject with maturity, with skepticism and, most of all, with an open mind."

Noting that the AMA's Medigredit bill has attracted over 150 sponsors, Dr. Hall said this doesn't mean that Medigredit is going to be enacted but does "mean that a substantial number of Congressmen and Senators agree with the principles that we used in drawing up a program and offering it to Congress."

Dr. Hall said Medigredit makes available to everyone under 65 a private program of complete medical and health care protection, cover-

ing both the ordinary and the catastrophic expenses of illness or accident.

"The protection can be a health insurance policy, membership in a prepayment plan or membership in a prepaid group practice. Each patient is left free to choose the kind of care he wants, and each physician is left free to practice as he wishes—alone or with other physicians."

The most important thing about Medigredit, said the AMA official, is that it maintains freedom for the patient as well as for the physicians.

"We believe that there is a lot of good in the present system. Two million Americans a day see their doctor, and although this probably is not all who should see a doctor, there is no reason to throw out the system that has this capacity. Rather we should build on it."

* * *

The AMA's often expressed desire to see the establishment of a separate Department of Health with cabinet status has again been brought to the public's attention with the announcement of Congressman Paul G. Rogers (D-Fla.), chairman of the House's subcommittee on health, that he will shortly introduce such a measure.

The issue seems to turn on the intertwined questions of which committees in Congress have the job of enacting and overseeing a national program and how the federal government will administer it.

During the past 10 years or so health has mushroomed as an economic force in American life, and as a function of government. Neither Congress nor the executive branch has been able to keep pace organizationally with the changes.

Congressman Rogers' call for a separate health department is considered to be part and parcel of this behind-the-scenes jockeying by the Congress for more authority in health care matters. If a Department of Health was established, Rogers' subcommittee could claim authority over all of the activities of the new department and drive to establish a permanent full committee on health.

However, Rogers' proposal runs head-on against current thinking in the administration

where policy has jelled in support of the current tri-function HEW apparatus. The trend of administration thought is that fewer departments make for more efficiency and coordination, less bureaucracy.

* * *

A comprehensive actuarial study of all of the major proposals for national health insurance arrangements prepared by HEW has been released for the information of Congressional committees studying the issue.

The actuarial report's prediction of gross underfinancing in the Kennedy proposal for federal assumption of the bulk of health care costs was the most noteworthy item in the 83-page report. The work was reviewed by outside experts to check on its fairness and soundness.

The major plans before Congress would compare in terms of additional costs to the government as follows:

Administration—\$2.6 billion.
Kennedy—\$59.4 billion.
Medicredit (backed by the AMA)—\$6.3 billion.
Burleson (the health insurance industry plan)—\$7.3 billion.
Javits (Medicare for all)—\$41.6 billion.
Hall-Long (Catastrophic only)—\$3.2 billion, \$3.1 billion.
Pell-Mondale (mandated employer plans, health care corporations)—\$4.9 billion.

For the most part, these costs represent "transferred" spending from the private sector to the federal sector. In the case of Medicredit, financed largely by tax credits for purchase of comprehensive private insurance, most of the "cost" represents a revenue loss rather than an additional expense.

The HEW report said overall federal spending under the Kennedy bill, including existing programs it would take over, would total \$81.6 billion in the fiscal year 1974, but that the proposed financing would raise only \$57 billion. Thus, it would be underfinanced by 43 percent, or \$24.6 billion.

National health expenditures of all kinds will rise to \$105.4 billion in fiscal 1974, an average

increase of 12 percent a year, if none of the major proposals is enacted. Operation of the Kennedy program in fiscal 1974 would result in total U. S. health spending (government and private) of \$113.8 billion: the administration bill, \$107.2 billion; the insurance industry bill, \$110 billion; and Medicredit, \$109.5 billion.

* * *

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, September 19, 1971, in the Coachman's Inn, Little Rock. Present were: Long, Applegate, Watson, Shorey, Shuffield, Raney, Edwards, Paul Gray, Dwight Gray, Irwin, Wynne, Duzan, Harris, Kemp, McCrary, Bethel, Kolb, Kirby, Henry, Koenig, Chudy, Wilkins, Purcell Smith, Verser, Ellis, Thomas, Fowler, guests of Charles D. Cyphers, James R. Weber, George K. Mitchell, Edgar Easley, Frank Burton, John Guenther, E. D. McKelvey, and Mr. Warren, Mr. Schaefer and Miss Richmond.

Invocation was given by Payton Kolb.

Chairman Long requested a moment of silence for W. R. Brooksher, who died on September 4, 1971.

The Council then transacted business as follows:

1. Mr. Schaefer presented a Memorial Resolution on W. R. Brooksher. The resolution was unanimously adopted by the Council. Motion for adoption was by Elvin Shuffield. (See attached copy of resolution.)

2. H. W. Thomas advised the Council that Dr. Brooksher's death created a vacancy on the Budget Committee. Robert Watson nominated C. C. Long for the committee position. Upon the motion of Elvin Shuffield and A. S. Koenig, the Council voted to appoint Dr. Long as a member of the Budget Committee with the chairman of the committee to be designated by the committee members.

3. Dr. Long reported that the Executive Committee had selected Robert Watson as a nominee for the Society representative on the Executive Committee of the Arkansas Regional Medical Program. Motion by Hugh Edwards and A. S. Koenig was for approval of nomination of Dr. Watson and the Council so voted.

4. Chairman Long called the attention of the Council to the material received from Blue Cross-Blue Shield on the rating experience for the Society's group plan. A rate increase proposed for the plan's anniversary date of September 1st is to be postponed for the duration of President Nixon's price freeze. After some discussion of the group's rating experience and small member enrollment, Robert McCrary moved that the Society's Insurance Committee be asked to investigate the possibility of (1) rate advantage of options on deductibles for the Blue Cross-Blue Shield group plan, and (2) obtaining group plan with same benefits at lower rate from another insurance company.

5. Upon the motion of Hugh Edwards and George Wynne, the Council voted to designate the Committee on Public Health to work with the AMA Committee on Health Care of the Poor in activities in that area.

6. C. R. Ellis, chairman of the Society's Committee on Medicine and Religion, outlined the committee's tentative plans for a statewide symposium proposed for September 1972. The meeting will be held in Little Rock on a weekend when the Razorbacks have a game scheduled there. The Saturday program will consist of discussions between physicians and ministers; speakers will be scheduled for Sunday. The anticipated cost of \$1,000 would be underwritten by pharmaceutical companies. The program would carry the theme of "Strangers When We Meet" and would be under the control of the Committee on Medicine and Religion. The Council voted, upon the motion of Robert McCrary and Kenneth Duzan, to approve the Committee's plans.

7. Mr. Warren reviewed for the Council the history of legislation to license osteopaths in Arkansas. Dr. Verser discussed the ruling of the Attorney General of Arkansas regarding licensure of osteopaths by reciprocity. It was the consensus of the Council that the State Medical Board should work with the Attorney General in solving problems pertaining to licensing of osteopaths.

8. The Council voted, upon motion of Robert McCrary and A. S. Koenig, to do everything in its power to support the Medical Board in retaining Mr. Warren as its legal counsel.

9. Upon the motion of Bascom Raney and Robert McCrary, the Council voted to appoint a committee to investigate the feasibility of hiring a public relations firm to assist the Society in a public relations program. The Committee is to be appointed by the Chairman of the Council.

Approved: C. C. Long, M.D.
Chairman of the Council

* * *

Supplement to Council Minutes

DR. WILLIAM R. BROOKSHER

December 8, 1894 — September 4, 1971

The Arkansas Medical Society marks the death of Dr. W. R. Brooksher with deep sorrow and a great sense of loss.

He served the Arkansas Medical Society as secretary from 1933 until 1952. His service as editor of the Journal of the Arkansas Medical Society extended from 1933 until 1953. He was named Secretary Emeritus in 1953 and served as president for 1954-55. Dr. Brooksher served with distinction as delegate to the American Medical Association from 1934 to 1954. Although he had retired from his official positions, his integrity and sense of fairness continued as a standard for all who knew him. His interest in, and support of, organized medicine continued undiminished until the end of his fruitful life on September 4, 1971.

His high code of personal and professional conduct governed every aspect of his life. His thoughtfulness and courtesy elicited affection and admiration from all those privileged to work with him.

His ready wit, uncompromising honesty and strength of character were matched by his willingness to make whatever sacrifice was required to promote the welfare of medicine. "His life was gentle and the elements were so mixed in him that nature could stand up to all the world and say 'this was a man'."

* * *

MEDICAL ASSISTANTS SOCIETY

Mrs. Edith L. Moser, an employee of Dr. Merlin J. Kilbury, Jr., of Little Rock, has passed

the certification examination of the American Association of Medical Assistants. The certification examination is a professional goal signifying broad mastery of AAMA's standards for highly qualified medical assistants. The "Certified Medical Assistant" may be attained in either the clinical or administrative categories, or both. Mrs. Moser qualified in the administrative category.

Other members of the Arkansas State Society of AAMA who have attained certification are Mrs. Vera Stemmle (employed by Dr. W. R. Meredith, Pine Bluff), Mrs. Marilyn Pryor, Texarkana (employed by Dr. R. H. Chappell), and Mrs. Pebble Watt of Pine Bluff (who works for the Children's Clinic in Pine Bluff).

At a meeting of the House of Delegates of the State Society in September, Miss Charleen Hardeman of Little Rock was elected to honorary membership in the medical assistants organization. Miss Hardeman served as the first president of the State Society and has served a number of years as the organization's executive secretary. Mrs. Melba Stockdale of Little Rock was elected to Life Membership. She recently retired after thirty years of employment in the medical field. Mrs. Barbara Stillings, who works for Dr. E. K. Clardy in Hot Springs, was named to replace Miss Hardeman as executive secretary.

The medical assistants organization stresses its educational program. The Sebastian County Chapter had an enrollment of one hundred for an educational seminar in September. Dr. Lawrence C. Price of Fort Smith instructed two sessions in medical terminology; other sessions dealt with human relations and insurance. The Pulaski County Chapter has a six-week course on anatomy in progress. The course is being conducted by Dr. Merlin Kilbury, Jr.

The current president of the State Society, Mrs. Marilyn Pryor, will be among members of the group attending the AAMA annual convention in Atlanta in November. Others attending the educational-business session will be Barbara

Stillings, Hot Springs (Dr. Clardy); Helen Cameron and Frances Reibe, El Dorado (office of Drs. Duzan & Elliott); Phyllis Haley, Texarkana (Southern Clinic); Deany Reid, Fayetteville (office of Drs. Mashburn and Page); and Ginger Patton, of the Pediatric Clinic staff in Fayetteville.

* * *

Regulations on Controlled Substances Bureau of Narcotics and Dangerous Drugs

The Society headquarters office has received the following communication from Mr. J. Bernard Redd, Special Agent in Charge of the Bureau of Narcotics and Dangerous Drugs in Little Rock:

"It has come to my attention that a number of Arkansas physicians are in doubt, or do not completely understand, the new laws and regulations recently enacted for controlled substances. The old adage, 'ignorance of the law is no excuse,' is applicable in this situation. In an effort to prevent violations I have prepared a list of 'Don'ts for the Physician.' [Please see following page.] If this information could be disseminated to the physicians, embarrassing and serious situations may be averted. I would certainly appreciate your assistance in this matter.

"There are many areas of change since the enactment of the Controlled Substances Act. If any physicians have questions . . . please feel free to direct them to the nearest BNDD office. In Arkansas this would be my office at 700 West Capitol, Room 2403, Little Rock. My telephone number is 375-8605. We can provide detailed informational outlines upon request and on an individual basis we can provide copies of the law and regulations.

"I have enclosed a summarized list of 'Don'ts for the Physician.' In the near future I will forward a more extensive list and other information of interest to the physician. In the meantime, the summarized list answers most questions that have been included in recent complaints."



UNITED STATES DEPARTMENT OF JUSTICE

BUREAU OF NARCOTICS AND DANGEROUS DRUGS

The Bureau of Narcotics and Dangerous Drugs has received many inquiries since the enactment of the Controlled Substances Act. One very common question is, "What drugs are in each Schedule?" In hopes of clarifying this, some examples of drugs in each schedule are outlined below:

SCHEDULE I

Drugs that have no known medical use fall into this category. Examples: Heroin, marihuana, LSD and mescaline.

SCHEDULE II

Drugs formerly known as Class A narcotics, amphetamines and methamphetamines are in this schedule. Examples: Opium, Morphine, Demerol, Cocaine, Benzedrine, Dexedrine, Desoxyn and Desubtal.

SCHEDULE III

Drugs formerly referred to as Class B narcotics and some stimulant and depressant drugs are in this schedule. Examples: Empirin with Codeine, Phenaphen with Codeine, Tussionex, Noludar, Doriden, Preludin, Seconal, Nembutal and Fiorinal.

SCHEDULE IV

Most of the drugs in this schedule are tranquilizers or long acting barbiturates. Examples: Phenobarbital, Valmid, Placidyl, Miltown and Equanil.

SCHEDULE V

Drugs in this schedule include those formerly known as "exempt narcotics," such as the cough syrups containing Codeine. Examples: Robitussin AC, Terpin Hydrate with Codeine, Cosanyl and Cheracol (with Codeine).

The examples listed in each schedule are by no means a complete list of the drugs controlled. For information on other drugs in these schedules contact your local pharmacist or the BNDD office near you.



UNITED STATES DEPARTMENT OF JUSTICE
BUREAU OF NARCOTICS AND DANGEROUS DRUGS

"Don'ts For The Physician"

Don't contact the Internal Revenue Service (IRS) in regards to registration or for order forms. These inquiries should now be directed to the Bureau of Narcotics and Dangerous Drugs (BNDD).

Don't telephone prescriptions for Schedule II drugs. A pharmacist may not fill such a prescription unless it is signed personally by you and in the same manner as you would sign a check or other legal document.

Don't write a controlled drug prescription, regardless of schedule, without placing your BNDD registration number on it. Preprinted pads, with the number included, are satisfactory. The BNDD number is *not* your old IRS registry number.

Don't write a controlled drug prescription, regardless of schedule, without placing the full name and *address* of the patient and your name, address and BNDD number on it.

Don't request a pharmacist to refill a prescription for a Schedule II drug. This is prohibited. Prescriptions for Schedule III, IV and V drugs may be refilled five times within six months after the issue date.

Don't resent a pharmacist's call for information about a prescription you may have written. He must determine if the prescription is valid. Please cooperate.

Don't hesitate to call the BNDD office in your area to obtain or give information. It will be held strictly confidential.



THINGS



TO

COME

American College of Nutrition to Meet

The Twelfth Annual Meeting of the American College of Nutrition will be held in New Orleans, Louisiana, on Sunday, November 28, 1971, in the Grand Ballroom of the Royal Sonesta Hotel. The one-day program includes a symposium on hyperlipidemias and atherosclerosis and a discussion of nutrition in outer space. Hotel reservations should be made through the American Medical Association Housing Bureau.

Symposium to Be Held in February

The Radiology Department of St. Mary of the Plains Hospital, in conjunction with the Department of Business Administration at Texas Tech University, will hold a Symposium on the Fundamentals of Management for Supervisory Technologists in Radiology on February 17, 18 and 19, 1972, at St. Mary's Hospital in Lubbock, Texas. The enrollment is limited to 100 registrants and the tuition is \$50. For a brochure, and further information, contact:

Buerk Williams, M.D., or Joe Vela, R.T.
Symposium Coordinators
Radiology Department
St. Mary of the Plains Hospital
Lubbock, Texas 79410

American Board of Family Practice to Give Examinations

The American Board of Family Practice announces that it will give its next examination for certification in various centers throughout the United States. The examination will be over a two-day period on April 29-30, 1972. The deadline for receiving completed applications in the Board office is February 1, 1972. Information regarding the examination can be obtained by writing:

Nicholas J. Pisacano, M.D., Secretary
American Board of Family Practice, Inc.
University of Kentucky Medical Center
Annex #2, Room 229
Lexington, Kentucky 40506

Postgraduate Courses Offered

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate courses of instruction for pediatricians, obstetricians, and other physicians interested in receiving training in the field of Maternal and Child Health. These programs all lead to the degree of Master of Public Health. Tax-exempt Fellowships are available, consisting of support for the trainee and his dependents, tuition and fees.

Program areas available at the present time include nine-month programs in Maternal and Child Health, Health of School-Age Children and Youth, and Maternal Health and Family Planning. Twenty-one month programs in Care of Handicapped Children, Comprehensive Health Care and Perinatology are available. Fellowships are available for these programs.

Applications are now being accepted for the group entering September 1972. For information, write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.

Cancer Forum Scheduled

The Arkansas-Oklahoma Cancer Society is sponsoring a Cancer Forum to be held April 7 and 8, 1972, at Little Rock in the Auditorium of the University of Arkansas Medical Center. Subjects to be discussed are: Germ Cell Tumors of the Ovary; Adenomatous Hyperplasia of the Endometrium; Cancer of the Endometrium; Schauta Hysterectomy for Early Invasive Cancer of the Cervix; Human Values in the American Cancer Society; Melanoma, What Is It?; Primary Treatment of Melanoma; When Is Lymphadenectomy Indicated in the Treatment of Melanoma?; Palliative Chemotherapy for Melanoma; Abdomino-Perineal Resection vs. Anterior Resection for Adenocarcinoma of the Rectum and Rectosigmoid; No Touch Technique for Carcinoma of the Colon; Post-operative Radiotherapy and Adjuvant Chemotherapy; and What Constitutes Proper Treatment of Columbia Class A & B Adenocarcinoma of the Breast?



RESOLUTIONS



William R. Brooksher, Sr., M.D.

WHEREAS, on September 4, 1971 death claimed from our ranks one of the State's most dedicated physicians, William R. Brooksher, Sr., M.D., and

WHEREAS, Dr. Brooksher was a dedicated practitioner in the specialty of radiology, and

WHEREAS, Dr. Brooksher was a graduate of Tulane University, and

WHEREAS, his willingness to serve and his integrity elevated him to the most responsible positions in the County, as well as the State Medical Society. He served as president of the Sebastian County Medical Society in 1924. He served as delegate to the AMA from 1934-1954. He served as Secretary to the Arkansas State Medical Society from 1933-1952 and was named Secretary Emeritus in 1953, and

WHEREAS, he served as editor of the Journal of the Arkansas Medical Society from 1933-1953, and

WHEREAS, he was named president elect in 1953 and served as President of the Arkansas Medical Society from 1954-1955, and

WHEREAS, Dr. Brooksher's wit, wisdom and his boundless energy caused him to make his mark upon men and resulted in his counsel and advice being sought by many, and

WHEREAS, Dr. Brooksher found time to serve as a teacher in our Medical Center at the University of Arkansas School of Medicine, and

WHEREAS, Dr. and Mrs. W. R. Brooksher founded a student loan fund at the Medical Center, these funds being to aid students in training as radiological para-medical personnel, and

WHEREAS, his leadership and dedication to his profession has probably contributed more to organized medicine in Arkansas than any other man over the span of the last two generations,

NOW, THEREFORE, BE IT RESOLVED: That the Sebastian County Medical Society ex-

press to the family of Dr. Brooksher its grief and sense of loss upon the passing of our revered and honored friend,

BE IT FURTHER RESOLVED: That a copy of this resolution be supplied to the members of Dr. Brooksher's family, and

BE IT FURTHER RESOLVED: That this memorial be published in the minutes of the Sebastian County Medical Society.

Adopted: Sebastian County Medical Society

October 12, 1971

E. A. Mendelsohn, M.D., President

McDonald Poe, Jr., M.D., Secretary

L. A. Whittaker, M.D., Chairman,

Resolutions Committee

* * *

William R. Brooksher, Sr., M.D.

WHEREAS, the members of the Arkansas Chapter, American College of Radiology, wish to express their sincere sorrow on learning of the death of one of its most esteemed members, W. R. Brooksher, Sr., M.D., and

WHEREAS, Dr. Brooksher had longer than any other member of the Society been a member of this organization to which he devoted immeasurable time and talent, and

WHEREAS, the Arkansas Chapter, American College of Radiology recognizes the contributions made by Dr. Brooksher to the profession in his years of service in various places of responsibility in the Arkansas Medical Society,

BE IT THEREFORE RESOLVED: That this resolution be forwarded to Dr. Brooksher's family as an expression of the sincere sympathy of the members of the Arkansas Chapter, American College of Radiology, and

That a copy of this resolution be made a part of the permanent archives of this Society, and

That a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

Unanimously adopted by

The Arkansas Chapter,

American College of Radiology

John W. Lane, M.D., President

David H. Newbern, M.D., Secretary



BOOK REVIEWS

Review of Physiological Chemistry, by Harold A. Harper; Lange Medical Publications, Los Altos, California. 1971.

Teeth, Teeth, Teeth, A Treatise on Teeth and Related Parts of Man, Land and Water Animals from Earth's Beginning to the Future of Time, by Sydney Garfield, D.D.S.

Review of Medical Physiology, despite the wide number of text books currently on the market, this reviewer enjoyed seeing the different perspectives on the same subject by various authors. The *Review of Medical Physiology by Ganong*, is a well written paperback book, amply illustrated with charts, drawings, and pictures. This reviewer would like the information imparted to be more closely related to medical practice — but this shortcoming does not detract from the value of the book as an interesting, comprehensive, well written text. The book is not entirely lacking in efforts to intergrade normal physiology and disease physiology; it could be improved by giving specific methods of detecting disease by altered physiology. This book is recommended to medical students and practicing physicians as a relatively inexpensive worthwhile book.



Prevention of Postoperative Deep Venous Thrombosis and Pulmonary Embolism

A. E. Carter, R. Eban and R. D. Perrett (King Edward Memorial Hosp, London)
Brit Med J 1:312-314 (Feb 6) 1971

Many antimalarial agents reduce red cell aggregation in trauma; of these, hydroxychloroquine sulfate also reduces ADP-induced platelet aggregation. On the assumption that platelet aggregation may be the precedent to postoperative venous thrombosis and, therefrom, pulmonary embolism, hydroxychloroquine sulfate was given to patients submitted to major surgery to reduce the incidence of deep vein thrombosis (DVT) and pulmonary embolism (PE). Significant reduction in DVT as estimated by clinical observation and by venograms was demonstrated. Similarly, a significant reduction in the incidence of PE was obtained. The incidence of DVT in a group of 565 patients (281 controls; 284 treated) was 9% in controls and 9% in treated, and as estimated by venography (26 controls; 26 treated), DVT occurred in 36% of controls and in none of the treated. Similarly, PE occurred in 6% of controls and 1% of the treated.

Plasma Insulin Response to Oral Glucose Load in Non-coronary Heart Disease

W. S. Aronow, and J. R. Kent (Univ of California College of Medicine, Irvine 92664)
Chest 59:184-187 (Feb) 1971

Fourteen patients with non-coronary heart disease (mean age 46 years) and 14 controls (mean age 46 years) had oral glucose tolerance tests with plasma glucose and plasma immunoreactive insulin levels determined. None of the 28 subjects was obese, malnourished, or had a history of angina or diabetes, a family history of diabetes, or of liver, renal or thyroid disease, hypokalemia, or was on diuretics. Eight of 14 patients (57%) with non-coronary heart disease had abnormal plasma insulin response compatible with maturity-onset diabetes, and one of these 14 patients (7%) had a diabetic glucose tolerance curve. Three of 14 control subjects (21%) had a plasma insulin response compatible with maturity-onset diabetes, and none of these controls had abnormal glucose tolerance. These results indicate that the abnormal plasma insulin response to an oral glucose load found in many patients with non-coronary heart disease represents a non-specific metabolic abnormality.

Immunological Control of *Pseudomonas* Infections in Burn Patients

J. W. Alexander (Univ of Cincinnati Medical Center, Cincinnati 45221), M. W. Fisher, and B. G. MacMillan
Arch Surg 102:31-34 (Jan) 1971

A polyvalent *Pseudomonas* vaccine was given to 96 consecutive patients who survived the initial five days after admission with burns greater than 20% (average 42.8%). Deaths from *Pseudomonas* sepsis occurred in three (3.1%). In contrast, 11 (14.1%) of 75 similar consecutive patients during the period immediately preceding use of the vaccine died from *Pseudomonas* sepsis. In the most susceptible groups of patients (those with a 40% or greater burn), mortality from all causes in vaccinated patients was reduced 15.7%, and mortality from the *Pseudomonas* sepsis was reduced 86%. Minor local reactions to the vaccine occurred in the majority of patients, but there were no serious reactions in over 1,500 injections. This vaccine represents a significant advance in the management of the seriously burned patient, and its use has resulted in a significant decrease in mortality following burn injury.

Thank You, Doctor



P.S. AAMA bylaws provide that the association, "is not, nor shall it ever become a trade union or collective bargaining agency."

Your continuing cooperation with the American Association of Medical Assistants has been generous. With your support our organization has achieved a membership of 14,000 medical assistants in more than 400 chapters in 45 states, District of Columbia and Puerto Rico.

Since our first organizational meeting 15 years ago, we have worked toward the primary goal of providing educational opportunities to the medical assistant in the doctor's office. In a short decade and a half the association has:

- Established and conducted a certification program as an incentive to self-education.
- Developed curricula for medical assisting programs in hundreds of junior and community colleges.
- Carried on a continuing education program for medical assistants through seminars, workshops and a professional bi-monthly journal.
- Published career materials and established a scholarship loan fund to help recruit future medical assistants.
- Cooperated with AMA in public relations efforts beneficial to the medical profession as a whole.

But our work cannot stop here. As the only national association for medical assistants, AAMA is eager to contribute to advancement of this allied health field. We would like to share our educational programs with all of the medical assistants across the nation. But to do this we need the co-operation of many more physicians.

If your medical assistant is not a member of AAMA, please fill out this coupon today. Her greater knowledge of medical assisting will be your reward.

American Association of Medical Assistants

I wish to inquire about membership for my medical assistant in the American Association of Medical Assistants, Inc. Please have someone send more information to:

Name _____

Business Address _____ Phone _____
(Street)

City _____ State _____ Zip _____

Member of county medical society: Yes _____ No _____

County _____

Name of Assistants: _____ Address: _____

Clip and mail to:

American Association of Medical Assistants
One East Wacker Drive
Chicago, Illinois 60601

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Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.^{1,2}

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

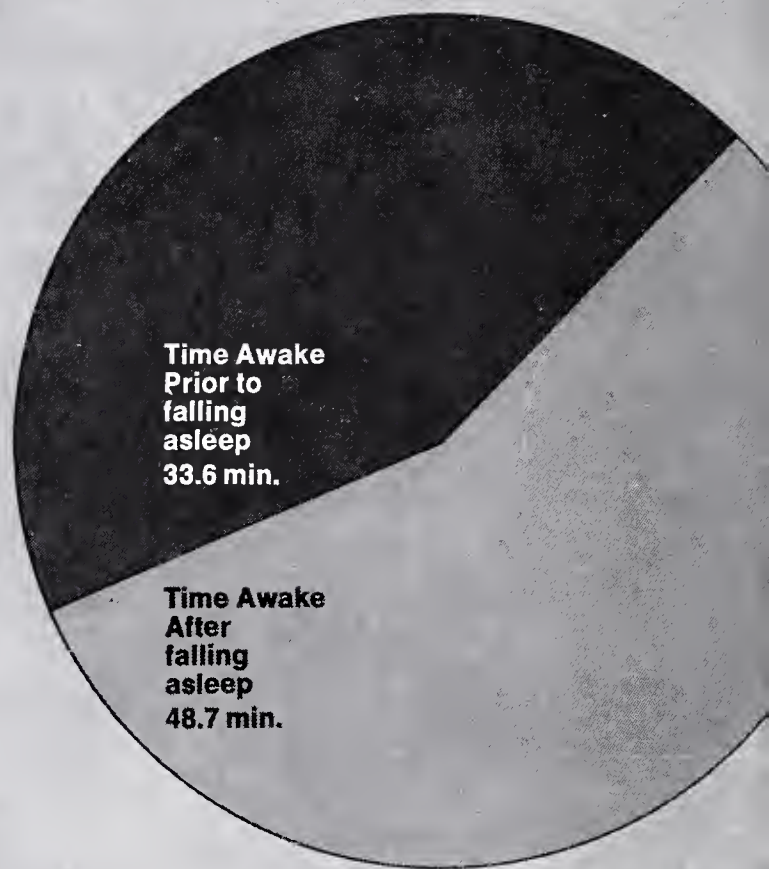
Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.

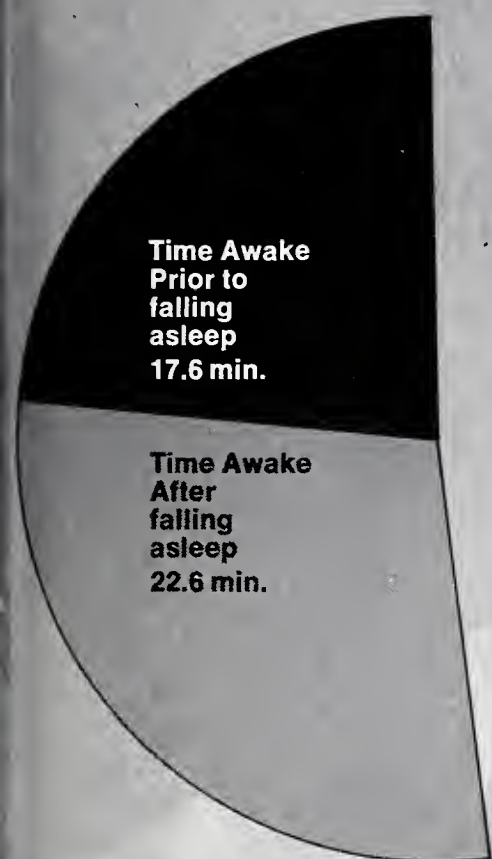
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

Before
Dalmane
(flurazepam HCl)



and slept through the night

On
Dalmane
(flurazepam HCl)



Age sleep laboratory measurements in cited studies

Parameter	Before Dalmane	On Dalmane
Time required to fall asleep	33.6 min.	17.6 min.
Time after onset of sleep	48.7 min.	22.6 min.
Number of wakeful periods after onset of sleep	12.2	8.4
Total sleep time	420.0 min.	447.5 min.
Efficiency of sleep percent	88.6	94.5

Initial effectiveness as
shown in the sleep laboratory

Dalmane®
(flurazepam HCl)

30-mg capsule h.s.—usual adult dosage.

15-mg capsule h.s.—initial dosage for
elderly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use only in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



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OR	Shanlever, W. T.	924 South Main, Jonesboro 72401	935-9123
IM	Shepherd, W. F.	505 East Matthews, Jonesboro 72401	932-8121
FP	Smith, Floyd A., Jr.	415 West Main, Trumann 72472	483-6411
FP	Smith, Vestal B.	P. O. Box 614, Marked Tree 72365	358-2811
R	Smoot, John D.	P. O. Box 934, Jonesboro 72401	932-9022
ANES	Sparks, E. Barrett	832 Cobb, Jonesboro 72401	932-4211
O8G	St. Clair, John T., Jr.	810 Jeter Drive, Jonesboro 72401	932-6609
FP	Stroud, Paul T.	311 East Matthews, Jonesboro 72401	932-8323
FP	Swingle, Charles G.	105 Nathan, Marked Tree 72365	358-2036
FP	Taylor, G. Wayne	211 East Matthews, Jonesboro 72401	935-1362
OPH	Utley, Phillip M.	920 South Main, Jonesboro 72401	932-8201
FP	Verser, Joe	P. O. Box 106, Harrisburg 72432	578-5443
PATH	Vollman, Don B., Jr.	411 East Matthews, Jonesboro 72401	932-7430
OPH	Webb, James W.	920 South Main, Jonesboro 72401	932-8221
GS	Wilson, Francis M.	505 East Matthews, Jonesboro 72401	932-1987
PATH	Wilson, Joseph T., Jr.	411 East Matthews, Jonesboro 72401	932-7430
FP	Wisdom, Durwood	505 East Matthews, Jonesboro 72401	932-8121

CRAWFORD COUNTY

FP	Darden, L. R.	Box 623, Van Buren 72956	474-6925
FP	Edds, Millard C.	1103 Chestnut, Van Buren 72956	474-2361
FP	Ferrell, G. H., Jr.	2226 Alma Highway, Van Buren 72956	474-9535
FP	Hopkins, Ed G.	1103 Chestnut, Van Buren 72956	474-2361
RD	Savery, Harry W.	1615 Cherry, Van Buren 72956 (Res.)	474-1332
FP	Shearer, F. E.	Route 2, Alma 72921	474-9539
FP	Thicksten, Jack N.	164 Fayetteville, Alma 72921	632-2117

CRITTENDEN COUNTY

FP	Deneke, Milton D.	300 South Rhodes, West Memphis 72301	735-1170
O8G	Ferguson, T. Murray	200 South Rhodes, West Memphis 72301	735-2150
O8G	Ford, Robert C., Jr.	200 South Rhodes, West Memphis 72301	735-2150
FP	Hamilton, Ralph B.	300 South Rhodes, West Memphis 72301	735-1170
GS	Jay, Gilbert D., III	200 South Rhodes, West Memphis 72301	735-4610
OPH	Kennedy, Keith B.	316 Tyler, West Memphis 72301	735-7680
GS	Lanford, H. G.	308 South Rhodes, West Memphis 72301	735-3664
FP	Lubin, Milton	200 South Rhodes, West Memphis 72301	735-3919
IM	Peoples, Chester W., Jr.	300 South Rhodes, West Memphis 72301	735-1170
FP	Pontius, David H., Jr.	300 South Rhodes, West Memphis 72301	735-1170
GS	Schoettle, Glenn P.	308 South Rhodes, West Memphis 72301	735-3664
FP	Smith, Bedford W.	300 South Rhodes, West Memphis 72301	735-1170
IM	Taylor, C. Herbert	200 South Rhodes, West Memphis 72301	735-4610
D	Thompson, Donald F.	200 South Rhodes, West Memphis 72301	735-4610
R	Wilson, John M.	955 Madison Avenue, West Memphis 72301	725-0161
FP	Winters, W. Lee	11 E Holiday Plaza, West Memphis 72301	735-8751
FP	Wright, William J.	P. O. Box 608, Earle 72331	735-4400

CROSS COUNTY

FP	Beaton, K. E.	P. O. Box 158, Wynne 72396	238-2321
FP	Bethell, Robert D.	Post Office Box 158, Wynne 72396	238-2321
FP	Burks, Willard G.	P. O. Box 158, Wynne 72396	238-2321
FP	Crain, Vance J.	P. O. Box 158, Wynne 72396	238-2321
FP	Hayes, Robert A.	411 South State, Wynne 72396	238-3261
RD	Hickman, Roger L.	Memphis, Tennessee	
FP	Jacobs, James R.	P. O. Box E, Wynne 72396	238-9649
FP	Young, J. Hosea	411 South State Street, Wynne 72396	238-3261

DALLAS COUNTY

FP	Adams, Carl H.	Carthage Clinic, Carthage 71725	254-2211
FP	Atkinson, H. H.	300 Cadiz, Fordyce 71742	352-2537
FP	Delamore, John H.	P. O. Box 351, Fordyce 71742	352-2771
FP	Dobson, Jack T.	110 North Clifton Street, Fordyce 71742	352-3151
FP	Estes, E. E.	P. O. Box 747, Fordyce 71742	352-2626
FP	Howard, Don Gene	110 North Clifton, Fordyce 71742	352-3151
FP	Taylor, George D.	Sparkman Clinic, Sparkman 71763	678-2406

DESHA COUNTY

FP	Blackwell, O. G.	145 West Waterman, Dumas 71639	382-4878
FP	Harris, Howard R.	207 South Elm, Dumas 71639	382-4425
FP	Lazenby, A. Wayne	145 West Waterman, Dumas 71639	382-4878
FP	Moss, Swan B.	102 North Fourth, McGehee 71654	222-3141
FP	Robinson, Guy U.	207 South Elm, Dumas 71639	382-4425
FP	Turney, Lonnie R.	101 South 3rd, McGehee 71654	222-4044

DREW COUNTY

FP	Binns, Van C.	201 East Trotter, Monticello 71655	367-3531
FP	Busby, Arlee K.	816 North Hyatt, Monticello 71655	367-3246
FP	Holder, James B., Jr.	300 East Roosevelt Road, Little Rock 72206	372-8361
FP	Hyatt, C. Lewis	515 North Main Street, Monticello 71655	367-5393
GS	Price, J. P.	216 South Main Street, Monticello 71655	367-5258
FP	Wallick, Paul A.	4301 West Markham, Little Rock 72205	664-5000

Type of Practice	Member's Name	Address	Telephone Number
FAULKNER COUNTY			
FP	Archer, C. A., Jr.	919 Locust, Conway 72032	329-2946
RD	Banister, Benjamin F., Jr.	1300 Parkway, Conway 72032	
FP	Banister, Bob G.	1300 Parkway, Conway 72032	329-3824
FP	Benafield, Robert B.	715 Front Street, Conway 72032	329-3808
GS	Clark, Robert L.	810 Parkway, Conway 72032	329-8313
FP	Daniel, Sam V.	574 Locust, Conway 72032	329-6111
FP	Downs, Joseph H.	P. O. Box 56, Vilonia 72173	NF
FP	Dunaway, Edwin L.	919 Locust, Conway 72032	329-2946
FP	Gordy, L. Fred, Jr.	552 Locust, Conway 72032	329-6881
FP	Lieblong, Keller	1300 Parkway, Conway 72032	329-3824
OPH	Magie, Jimmie J.	P. O. Box 1284, Conway 72032	327-4444
GS	Poindexter, Douglas	919 Locust, Conway 72032	327-0262
FP	Sutter, L. O'Neal	Nashville, Tennessee	
FP	Taylor, Robert L.	810 Parkway, Conway 72032	329-3815
FRANKLIN COUNTY			
FP	Blanton, David E. R.	110 West Commercial, Ozark 72949	667-2146
FP	Calaway, Robert L.	Drawer C, Mulberry 72947	997-3941
FP	Gibbons, David L.	506 West Commercial, Ozark 72949	667-2285
FP	Long, C. C.	110 West Commercial, Ozark 72949	667-2146
FP	Roberts, William J.	P. O. Box 428, Charleston 72933	965-2672
GARLAND COUNTY			
IM	Adams, Frank M.	236 Central Avenue, Hot Springs 71901	623-8751
IM	Arnold, William O.	1315 Central, Hot Springs 71901	624-1207
OTO	Atkinson, Robert H.	236 Central Avenue, Hot Springs 71901	623-6101
RD	Black, Thomas N.	133 Oakwood, Hot Springs 71901 (Res.)	623-2156
R	Bohnen, Loren O.	236 Central, Hot Springs 71901	623-6694
OPH	Bracken, Ronald J.	505 West Grand Avenue, Hot Springs 71901	624-4478
	*Brewer, Howell W.	Memphis, Tennessee	
U	Burrow, Thomas E.	903 West Grand Avenue, Hot Springs 71901	623-8110
GS	Burton, Frank M.	101 Whittington, Hot Springs 71901	624-5411
GS	Chamberlain, Joe W.	330 Sixth Street, Hot Springs 71901	623-4477
GS	Chamberlain, Warren W.	330 Sixth Street, Hot Springs 71901	623-4477
IM	Clardy, Edgar K.	P. O. Box 850, Hot Springs 71901	624-1281
U	Coffey, George C.	236 Central Avenue, Hot Springs 71901	623-2731
FP	Collier, Torrence J., Sr.	501 Malvern Avenue, Hot Springs 71901	623-8864
RD	Daniel, R. L.	Route 4, Box 657, Hot Springs 71901 (Res.)	767-3314
IM	Dembinski, T. Henry	804 1/2 Central, Hot Springs 71901	623-9781
ANES	Devine, J. C.	505 West Grand, Hot Springs 71901	623-9216
OPH	Dodson, John W., Jr.	505 West Grand, Hot Springs 71901	623-4541
OR	Durham, Thomas M.	505 West Grand, Hot Springs 71901	623-7717
GS	Eisele, W. Martin	101 Whittington, Hot Springs 71901	624-5411
FP	Fotioo, George J.	236 Central, Hot Springs 71901	623-5121
GS	French, James H.	101 Whittington, Hot Springs 71901	624-5411
PMR	Frye, Ivan L.	Rehabilitation Center, Hot Springs 71901	624-4411
GS	Garner, O. P.	1705 Central Avenue, Hot Springs 71901	623-3521
IM	Garratt, Charles E.	922 Central, Hot Springs 71901	623-2691
FP	Gaston, E. Kenneth, Sr.	236 Central, Hot Springs 71901	624-5666
D	Goetze, Dorothy	104 Curve Street, Hot Springs 71901 (Res.)	623-4913
OTO	Goodrum, William A.	236 Central Avenue, Hot Springs 71901	623-7031
IM	Graham, Richard F.	505 West Grand, Hot Springs 71901	623-4391
O8G	Haggard, John L.	101 Whittington, Hot Springs 71901	624-5411
PMR	Hassard, George H.	Post Office Box 1358, Hot Springs 71901	624-4411
ADM	Hebert, Gaston A.	Rehabilitation Center, Hot Springs 71901	624-4411
GS	Hill, Robert L.	905 West Grand, Hot Springs 71901	623-9581
IM	Hoyt, Jerry L.	328 Quapaw, Hot Springs 71901	624-4581
O8G	Jackson, Haynes G.	P. O. Box 2067, Hot Springs 71901	623-6628
OPH	Johnston, Gaither C., Jr.	505 West Grand, Hot Springs 71901	624-7106
FP	Keadle, William R.	408 #8 Highway, Glenwood 71943	356-3155
IM	King, Jack A.	300 Woodbine, Hot Springs 71901	624-3379
IM	King, Leeman H.	236 Central Avenue, Hot Springs 71901	623-1545
ANES	Klugh, Walter G., Jr.	505 West Grand, Hot Springs 71901	623-9216
FP	Klugh, Walter G., Sr.	238 Woodbine, Hot Springs 71901	623-4511
PATH	Knight, Patrick L.	P. O. Box 1460, Hot Springs 71901	623-2518
PATH	Lee, William R.	P. O. Box 1460, Hot Springs 71901	623-2518
FP	Lovell, Clarence R.	414 Albert Pike, Hot Springs 71901	624-3606
FP	Mashburn, William R.	236 Central Avenue, Hot Springs 71901	623-4453
GS	Meek, Gary N.	905 West Grand, Hot Springs 71901	623-9581
OR	Murray, DuBose	505 West Grand, Hot Springs 71901	623-7717
OR	McConkie, Stuart B.	715 West Grand Avenue, Hot Springs 71901	623-5300
GYN	McCrary, Robert F.	505 West Grand, Hot Springs 71901	624-5477
PD	McFarland, Louis R.	211 Hobson, Hot Springs 71901	623-5752
FP	McMahan, James C.	306 Albert Pike, Hot Springs 71901	624-2111
PD	Newton, Doane M.	236 Woodbine, Hot Springs 71901	624-2546
O8G	Pappas, Deno P.	101 Whittington, Hot Springs 71901	624-5411
FP	Parkerson, Carl R.	1421 Central, Hot Springs 71901	624-3341
FP	Parkerson, Cecil W.	1421 Central, Hot Springs 71901	624-3341
IM	Patterson, Ralph M.	231 Central, Hot Springs 71901	624-5567
FP	Power, Allyn R.	236 Central, Hot Springs 71901	623-3102
FP	Queen, George P.	1803 Central, Hot Springs 71901	623-3373
FP	Reed, Lon E.	1315 Central, Hot Springs 71901	624-1207
PD	Rosenzweig, Joseph L.	236 Woodbine, Hot Springs 71901	624-2546
IM	Rowland, Ely Driver	110 Hawthorne, Hot Springs 71901	623-5581
GS	Sammons, Vernon E., Jr.	905 West Grand Avenue, Hot Springs 71901	623-9581
RD	Scully, Francis J.	16 Conway Boulevard, Hot Springs 71901 (Res.)	623-3726
FP	Smith, Oliver A.	236 Central Avenue, Hot Springs 71901	623-1121
IM	Smith, William K.	236 Central Avenue, Hot Springs 71901	623-2171
R	Springer, Melvin R., Jr.	236 Central Avenue, Hot Springs 71901	623-6693
R	Springer, William Y.	236 Central Avenue, Hot Springs 71901	623-6694
FP	Stough, D. B.	236 Central Avenue, Hot Springs 71901	623-6921
D	Stough, D. B., III	236 Central Avenue, Hot Springs 71901	624-3201
O8G	Thompson, Thomas P., Jr.	101 Whittington, Hot Springs 71901	624-5411
PD	Trieschmann, John W.	236 Woodbine, Hot Springs 71901	624-2546
U	Wade, H. King, Jr.	231 Central Avenue, Hot Springs 71901	624-5641
GS	Wright, Jack	211 Hobson, Hot Springs 71901	623-6677
NP	Yohe, Charles D.	236 Central Avenue, Hot Springs 71901	623-2517

Type of Practice	Member's Name	Address	Telephone Number
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GRANT COUNTY

FP	Clark, Curtis B.	200 South Rose, Sheridan 72150	942-3155
FP	Irvin, Jack M.	205 West High Street, Sheridan 72150	942-3171
RD	Kelly, Miles	108 South Arch Street, Sheridan 72150 (Res.)	942-4152
FP	Paulk, Clyde D.	200 South Rose, Sheridan 72150	942-3155

GREENE-CLAY COUNTY

R	Baker, A. J.	P. O. Box 339, Paragould 72450	236-7733
FP	Baker, Clark M.	115 West Court, Paragould 72450	236-6356
FP	Bradsher, Omer E.	901 West Kingshighway, Paragould 72450	236-8765
FP	Collier, George H., Jr.	901 West Kingshighway, Paragould 72450	236-8765
FP	Crow, Asa A.	320 South Tenth Street, Paragould 72450	236-3508
GS	Duckworth, Gordon L.	Piggott Hospital, Piggott 72454	598-2237
FP	Duckworth, Hillard R.	425 West Jackson, Piggott 72454	598-2237
FP	Finch, Robert M.	1001 Kingshighway, Paragould 72450	236-7623
FP	Futrell, J. B.	414 West 2nd Street, Rector 72461	595-3332
FP	Harper, Bland R.	P. O. Box C, Monette 72447	486-2131
GS	Lawson, J. Larry	216 West Court, Paragould 72450	239-9631
ANES	Martin, Richard O.	P. O. Box 339, Paragould 72450	236-7733
FP	Muse, Jerry L.	425 West Jackson, Piggott 72454	598-2237
P	McGaughey, Solon	901 West Kingshighway, Paragould 72450	236-8765
FP	McKelvey, Earle D.	409 South 5th Street, Paragould 72450	236-8716
FP	Page, Bill C.	602 West Second, Corning 72422	857-3541
R	Purcell, Donald I.	P. O. Box 364, Paragould 72450	239-8883
PATH	Richmond, Jack G.	P. O. Box 339, Paragould 72450	236-7733
FP	Shedd, L. L.	901 West Kingshighway, Paragould 72450	236-8765
IM	Starnes, C. W.	112 West Court, Paragould 72450	239-8607
FP	Watson, Samuel D.	411 South 7th Street, Paragould 72450	236-8591
FP	Williams, Jacob M.	1001 West Kingshighway, Paragould 72450	236-7623

HEMPSTEAD COUNTY

FP	Branch, James W.	426 South Main, Hope 71801	777-3471
FP	Harris, C. Lynn	P. O. Box 550, Hope 71801	777-2131
FP	Harris, Lowell O.	P. O. Box 550, Hope 71801	777-2131
FP	Holt, Forney G.	420 East Second, Hope 71801	777-6722
GS	Martindale, James G.	116 South Main, Hope 71801	777-3464
FP	Martindale, Jud B.	116 South Main, Hope 71801	777-3464
FP	McKenzie, Jim	P. O. Box 445, Hope 71801	777-2321
FP	Wright, G. H.	220 East Second, Hope 71801	777-6722

HOT SPRING COUNTY

FP	Brashears, Larry B.	214 East Highland, Malvern 72104	332-5245
FP	Cobb, Russell W.	1420 Potts, Malvern 72104	332-3112
FP	Cole, John W.	725 East Page Avenue, Malvern 72104	332-5641
FP	Ellis, C. Randolph	1004 South Main, Malvern 72104	332-6941
FP	Kersh, N. 8.	1518 McBee, Malvern 72104	337-7533
FP	McCray, Raymond V.	214 East Highland, Malvern 72104	332-2704
P	Parsons, V. Earl	1234 South Main, Malvern 72104	337-9281
FP	Peters, Claude F.	1420 Potts, Malvern 72104	332-2521
FP	Vaughan, John A.	115 East Highland, Malvern 72104	332-2371
FP	White, Robert H.	1004 Dyer, Malvern 72104	332-3664
FP	Wise, John D.	1219 South Main, Malvern 72104	332-6961

HOWARD-PIKE COUNTY

FP	Dildy, Edwin V.	122 West Hempstead, Nashville 71852	845-1933
	*Floyd, G. J., Jr.	Murfreesboro	
RD	Holt, Horace H.	Route 1, Box 211, Nashville 71852 (Res.)	845-2406
FP	Jones, William J.	P. O. Box 49, Glenwood 71943	356-3921
FP	Smith, U. Lee	P. O. Box 807, Nashville 71852	845-3880
FP	Turbeville, James O.	120 West Syfert, Nashville 71852	845-4676
FP	Ward, Hiram T.	510 North Washington, Murfreesboro 71958	285-2491
R	Webb, Kathleen E.	2701 Pine Street, Texarkana 75501 (Res.)	792-9353
FP	Wesson, John H.	120 West Syfert, Nashville 71852	845-4676
FP	Wilmoth, Marion H.	1400 Leslie, Nashville 71852	845-4780

INDEPENDENCE COUNTY

FP	Beck, Carl T.	Drawer "J", Mountain View 72560	269-3834
FP	Calaway, W. H.	181 South Broad Street, Batesville 72501	793-5251
RD	Churchill, Calvin A.	204 East 6th, Batesville 72501 (Res.)	793-5194
FP	Gray, W. Paul	P. O. Box 82, Batesville 72501	793-2321
FP	Hathcock, Alfred H.	P. O. Box 310, Batesville 72501	793-5767
	*Jeffery, Paul H.	Batesville	
RD	Johnston, O. J. T.	P. O. Box 856, Batesville 72501 (Res.)	793-7127
GS	Ketz, Wesley J.	P. O. Box 960, Batesville 72501	793-2371
FP	Lytle, Jim E.	181 South Broad Street, Batesville 72501	793-5251
GS	Monroe, Howard U.	Mountain View 72560	269-3236
FP	Moody, Lackey G.	377 Main, Batesville 72501	793-2371
FP	Raney, Wm. Troy	Medical Clinic, Cave City 72521	283-5762
FP	Slaughter, Bob L.	P. O. Box 1411, Batesville 72501	743-2540
FP	Smith, Bob G.	181 South Broad Street, Batesville 72501	793-5251
GS	Stalker, James M.	P. O. Box 1506, Batesville 72501	793-S205
FP	Tatum, Harold M.	P. O. Box 147, Melbourne 72556	368-4344
FP	Taylor, Chaney W.	181 South Broad Street, Batesville 72501	793-5251
FP	Taylor, Charles A.	181 South Broad Street, Batesville 72501	793-5251
FP	Walker, A. T.	Salem Clinic, Salem 72576	895-3000
FP	Wyatt, F. Q.	181 South Broad Street, Batesville 72501	793-5251

JACKSON COUNTY

IM	Ashley, John D.	Second and Laurel, Newport 72112	523-6721
GS	Carney, J. W.	Second and Laurel, Newport 72112	523-6721
IM	Dudley, Guilford M., III	1205 McLain, Newport 72112	523-5871
GS	Frankum, Jerry M.	Second and Laurel, Newport 72112	523-6721
FP	Green, Roger L.	Second and Laurel, Newport 72112	523-6721
GS	Harris, M. Haymond	1205 McLain, Newport 72112	523-5871
FP	Jackson, J. F.	1205 McLain, Newport 72112	523-2668
RD	Norris, Rufal O.	P. O. Box 626, Tuckerman 72473 (Res.)	349-5527
OPH	Stanfield, Wayne	1513 Malcolm, Newport 72112	523-3321
GS	Williams, Thomas E.	Second and Laurel, Newport 72112	523-6721
FP	Wright, John C.	1205 McLain, Newport 72112	523-5871
R	Young, Jack S., II	#1 Pickens Drive, Newport 72112	523-8358

Type of Practice	Member's Name	Address	Telephone Number
JEFFERSON COUNTY			
R.	Anderson, Charles W.	P. O. Box 7863, Pine Bluff 71601	534-8651
FP	Atnip, Gwyn	1111 West 15th, Pine Bluff 71601	534-0831
FP	Barksdale, Barbara A.	Barksdale Clinic, Rison 71665	325-6224
OR	Blackwell, Banks	1726 Doctors Drive, Pine Bluff 71601	534-3122
U.	Brooks, R. Teryl, Jr.	1421 Cherry, Pine Bluff 71601	535-2200
FP	Bryant, R. Frank	1112 Linden, Pine Bluff 71601	534-4352
OTO	Buckley, John W.	1714 Doctors Drive, Pine Bluff 71601	535-5719
ADM.	Burford, Thomas G.	106 Pennsylvania, Pine Bluff 71601 (Res.)	534-6981
R.	Burroughs, Clement D.	1515 West 42nd, Pine Bluff 71601	534-8651
PATH	Clark, James F., Jr.	1515 West 42nd Avenue, Pine Bluff 71601	535-6800
O8G	Coker, S. D.	1720 Doctors Drive, Pine Bluff 71601	536-4986
O8G	Crane, Henry	1107 Cherry, Pine Bluff 71601	535-0833
GE	Crenshaw, John	1421 Cherry, Pine Bluff 71601	535-2200
TS	Crow, R. Lewis	1724 Doctors Drive, Pine Bluff 71601	536-5861
FP	Cunningham, T. J.	300 West 6th, Pine Bluff 71601	534-4723
P.	Dean, Lee A.	1110 West 11th, Pine Bluff 71601	534-1834
GS.	Dickins, Robert D.	1003 Cherry, Pine Bluff 71601	534-8141
R.	Fendley, Claude E.	P. O. Box 7863, Pine Bluff 71601	534-8651
FP	Flowers, Cleon A.	119 East 4th Avenue, Pine Bluff 71601	534-5523
OPH.	Glasscock, Robert E.	1706 Doctors Drive, Pine Bluff 71601	534-4357
PD.	Hart, J. Clyde, Jr.	1310 Cherry, Pine Bluff 71601	534-6210
PD.	Henderson, F. M.	312 University Tower Building, Little Rock 72204	666-5411
IM.	Hoover, S. H.	1421 Cherry, Pine Bluff 71601	535-2200
U	Hutchison, Ernest L.	1724 West 42nd, Pine Bluff 71601	535-1562
O8G	Hyman, Carl E.	121 East 4th Avenue, Pine Bluff 71601	534-3365
GS.	Irwin, Raymond A. Jr.	1421 Cherry, Pine Bluff 71601	535-2200
FP	Jackson, William E.	P. O. Box 451, Rison 71665	325-6911
U	James, William Joe	2510 Cherry, Pine Bluff 71601	535-5400
CD	Jenkins, Bobby J.	1515 West 42nd Street, Pine Bluff 71601	536-3015
ANES.	Jenkins, Mary Ellen	1410 West 42nd, Pine Bluff 71601	535-5522
OPH.	King, Yum Y.	1008 West 11th Street, Pine Bluff 71601	536-1897
FP	Maynard, Ross E.	303 National Building, Pine Bluff 71601	534-5732
GS.	Meredith, William R.	1716 West 42nd, Pine Bluff 71601	535-8727
IM.	Miller, Donald L.	1710 West 42nd, Pine Bluff 71601	535-6644
R.	Milligan, Monte C.	1515 West 42nd Avenue, Pine Bluff 71601	535-8651
IM.	Monroe, Sanford C.	1421 Cherry, Pine Bluff 71601	535-2200
FP	Morris, Harold J.	1030 Poplar, Pine Bluff 71601	534-0822
R.	McDonald, Robert L.	P. O. Box 7863, Pine Bluff 71601	534-8651
R+	Nash, Carl W.	4301 West Markham, Little Rock 72205	664-5000
OPH	Nixon, William R.	709 West Sixth Street, Pine Bluff 71601	534-2624
RD.	Payne, Virgil L.	802 West Fifth, Pine Bluff 71601 (Res.)	534-5618
FP	Perry, V. Bryan	1722 West 42nd Avenue, Pine Bluff 71601	535-4141
O8G	Pierce, J. R., Jr.	1712 West 42nd Avenue, Pine Bluff 71601	535-3443
FP	Raney, Oliver C.	1720 West 42nd Avenue, Pine Bluff 71601	534-5861
OR	Reed, E. Frank, Jr.	916 Cherry, Pine Bluff 71601	535-0121
FP.	Reed, Ulysses S.	1111 1/2 East 4th Avenue, Pine Bluff 71601	534-6910
	*Reid, Charles W.	Pine Bluff	
PD	Rhyne, James T.	1310 Cherry, Pine Bluff 71601	534-6210
ANES.	Rice, James B.	1410 West 42nd, Pine Bluff 71601	535-5522
GS.	Rittelmeyer, Clarence M.	1716 West 42nd, Pine Bluff 71601	535-8727
GS.	Roberson, George V.	1708 Doctors Drive, Pine Bluff 71601	535-2716
FP.	Robinette, Joseph S.	1722 Doctors Drive, Pine Bluff 71601	535-2372
RD.	Russell, Allen R.	12 Southern Pines Drive, Pine Bluff 71601 (Res.)	534-6481
O8G	Simmons, Calvin R.	1714 West 42nd, Pine Bluff 71601	535-3213
GS.	Smith, Robert J.	817 Cherry, Pine Bluff 71601	535-1880
GS.	Stern, Howard S.	1315 Linden, Pine Bluff 71601	534-0342
GS.	Sullenberger, A. G.	1726 West 42nd, Pine Bluff 71601	534-4407
IM.	Talbot, George B.	1421 Cherry, Pine Bluff 71601	535-2200
PATH.	Tisdale, Alfred D.	1515 West 42nd Street, Pine Bluff 71601	535-6800
PD.	Townsend, Thomas E.	1310 Cherry, Pine Bluff 71601	534-6210
IM.	Tracy, Clyde	1421 Cherry, Pine Bluff 71601	535-2200
GS.	Wilkins, Walter J.	1421 Cherry, Pine Bluff 71601	535-2200
IM.	Wineland, H. L.	1710 Doctors Drive, Pine Bluff 71601	534-3561
PH.	Wooley, Ralph R.	P. O. Box 7267, Pine Bluff 71601	535-2142
JOHNSON COUNTY			
FP	Callaway, James R.	Arkansas State Hospital, Benton 72015	778-1111
	*Manley, Robert H.	Clarksville	
FP.	Shrigley, Guy P.	416 Sevier, Clarksville 72830	754-2043
LAFAYETTE COUNTY			
P.	Harrison, Robert H.	VA Hospital, North Little Rock 72114	372-8361
FP.	Lee, Willie J.	Post Office Box 276, Stamps 71860	533-4461
LAWRENCE COUNTY			
FP	Cruse, Edward J.	P. O. Box 116, Black Rock 72415	878-6209
RD.	Dickey, Albert B.	704 Northwest Third, Walnut Ridge 72476 (Res.)	886-5377
FP.	Elders, J. B.	321 Southwest Third, Walnut Ridge 72476	886-3162
FP.	Hickman, James H.	421 Southwest Third, Walnut Ridge 72476	886-6222
FP	Hughes, Joe E.	Highway 25 West, Walnut Ridge 72476	886-5123
OM.	Joseph, Ralph	Highway 25 West, Walnut Ridge 72476	886-3211
EM.	Whittington, J. J., III.	224 East Matthews, Jonesboro 72401	932-7451
LEE COUNTY			
FP	Dozier, Floyd S.	29 North Poplar, Marianna 72360	295-2107
FP.	Fields, E. C. Nowell	Route 3, Box 22-A, Marianna 72360	295-2616
FP.	Flowers, Bobby F.	100 West Main, Marianna 72360	295-3362
FP.	Gray, Dwight W.	110 West Chestnut, Marianna 72360	295-3131
FP.	McLendon, Mac	29 Columer Street, Marianna 72360	295-2711
LINCOLN COUNTY			
FP.	Freeland, James W.	P. O. Box 159, Star City 71667	628-4226
FP.	Petty, Richard C.	Box 580, Star City 71667	628-4292
LITTLE RIVER COUNTY			
FP.	Armstrong, James D.	P. O. Box 397, Ashdown 71822	898-3306
FP.	Peacock, Norman W., Jr.	P. O. Box 397, Ashdown 71822	898-3306
FP.	Shelton, Joseph G., Jr.	P. O. Box 397, Ashdown 71822	898-3306

Type of Practice	Member's Name	Address	Telephone Number
LOGAN COUNTY			
FP.....	Chalfant, Charles H.	113 West Third, Booneville 72927.	675-2455
PUD.....	Jones, W. Duane	State Sanatorium 72954.	675-2121
FP.....	Parker, B. G.	121 East 3rd, Booneville 72927.	675-2101
PUD.....	Robins, Rowland R.	State Sanatorium 72954.	675-2121
PUD.....	Smiley, George W.	State Sanatorium 72954.	675-2121
FP.....	Smith, Charles McD.	710 North Express, Paris 72855.	963-2191
FP.....	Smith, James T.	710 North Express, Paris 72855.	963-2191
LONOKE COUNTY			
FP.....	Gartman, Joseph F.	100 Court Street, Carlisle 72024	552-7561
FP.....	Harris, Willie R.	520 Northeast Fourth, England 72046	842-2551
FP.....	Holmes, B. E.	305 West Front, Lonoke 72086	676-6560
FP.....	Inman, Fred C., Jr.	521 North Williams, Carlisle 72024.	552-7575
RD.....	McEntire, Harry E.	VA Hospital, North Little Rock 72114 (Res.)	
CD.....	Schumann, Gerald M.	Des Arc General Hospital, Des Arc 72040.	256-4312
FP.....	Washburn, C. Yulan.	Post Office Drawer 8, Cabot 72023.	843-3579
FP.....	Wood, Thomas O., Jr.	England Hospital, England 72046.	842-2551
MILLER COUNTY			
R.....	Andrews, Allie E.	315 East 5th, Texarkana 75501.	214-794-2121
GS.....	Bransford, Robert M.	401 East 5th, Texarkana 75501.	774-3211
PD.....	Burnett, James W.	414 Hazel, Texarkana 75501.	774-7301
PD.....	Burroughs, James C.	401 East 5th, Texarkana 75501.	774-3211
PATH.....	Chappell, Robert H.	P. O. Box 1288, Texarkana 75501.	214-792-2161
NS.....	Edmonson, Retia L.	723 Wood Street, Texarkana 75501	214-793-5592
OBG.....	Ellison, Eugene T.	4800 Texas Boulevard, Texarkana 75501.	214-792-7151
IM.....	Goesl, Andrew G.	809 Pine Street, Texarkana 75501.	214-794-4702
GS.....	Harrell, William B., Jr.	317 State Line Road, Texarkana 75501.	214-792-8231
OBG.....	Harrison, Jack W.	P. O. Box 778, Texarkana 75501.	774-3211
OR.....	Hughes, Mary W.	1001 Main, Texarkana 75501.	214-792-6976
OR.....	Hughes, Robert Paul.	401 East Fifth, Texarkana 75501.	774-3211
OBG.....	Jones, John W.	401 East Fifth, Texarkana 75501.	774-3211
FP.....	Kemp, Karlton H.	408 Hazel, Texarkana 75501.	774-5181
RD.....	Kirkpatrick, R. R.	1806 Hickory, Texarkana 75501 (Res.)	774-4954
FP.....	Kittrell, James B.	Post Office Box 1453, Texarkana 75501.	214-794-6107
ANES.....	Laws, John K.	315 East Fifth, Texarkana 75501.	774-7297
PD.....	Lowe, Betty A.	401 East 5th, Texarkana 75501.	774-3211
R.....	McGinnis, Robert S.	P. O. Box 1409, Texarkana 75501.	214-792-7151
OPH.....	Newton, Norris L.	602 Main Street, Texarkana 75501.	214-792-8541
	*Pickett, R. W.	Texarkana	
IM.....	Rodgers, Nathaniel L.	401 East 5th, Texarkana 75501.	774-3211
FP.....	Rushing, Louis U.	P. O. Box 1471, Texarkana 75501.	214-792-1191
FP.....	Short, Harold H.	1400 College Drive, Texarkana 75501.	214-793-5671
FP.....	Smith, William D.	119 East 6th Street, Texarkana 75501.	772-0111
U.....	Teasley, Gerald H.	401 East Fifth, Texarkana 75501.	774-3211
GS.....	Townsend, Gene M.	1400 College Drive, Texarkana 75501.	214-793-5671
	*Wakefield, Elmer G.	Texarkana	
PATH.....	Wicker, Eugene H.	St. Michael Hospital, Texarkana 75501.	774-2121
	Wilhelm, Frieda.	Dallas, Texas	
GS.....	Wren, Herbert B.	P. O. Box 1409, Texarkana 75501.	214-792-7151
GS.....	Young, Mitchell	2123 Wood, Texarkana 75501.	214-792-8264
MISSISSIPPI COUNTY			
FP.....	Ball, Eugene H.	P. O. Box 226, Blytheville 72315.	763-4121
PH.....	Beasley, Joseph E.	North 10th Street, Blytheville 72315	763-7064
IM.....	Brock, Charles C., Jr.	527 North Sixth Street, Blytheville 72315.	763-8118
U.....	Campbell, C. E., Jr.	501 Hutson, Blytheville 72315.	763-0855
FP.....	Cole, C. R.	519 North Sixth, Blytheville 72315.	763-1554
FP.....	Elliott, John Q.	209 West Ash, Blytheville 72315.	763-4548
FP.....	Fairley, Eldon.	P. O. Box 71, Osceola 72370.	563-2686
FP.....	Fairley, Julian	P. O. Box 71, Osceola 72370.	563-2686
R.....	Gatz, John F., Jr.	Osceola Memorial Hospital, Osceola 72370	563-2611
FP.....	Green, W. O., Jr.	903 Chickasawba Street, Blytheville 72315.	763-6802
GS.....	Hard, John W.	527 North Sixth Street, Blytheville 72315.	763-8118
PATH.....	Hart, Sybil R.	10th and Division, Blytheville 72315.	763-5111
R.....	Hart, Wade A.	Route 4, Box 327, Blytheville 72315.	763-1617
FP.....	Holcomb, C. E.	511 North 6th, Blytheville 72315.	763-3922
	Hubener, Louis F.	Gainesville, Florida	
FP.....	Hubener, Lemly L.	509 Hutson, Blytheville 72315.	762-2021
FP.....	Johnson, Rass L.	852 Highland, Blytheville 72315 (Res.)	763-6201
IM.....	Jones, Herbert.	529 North 10th Street, Blytheville 72315.	763-8032
IM.....	Massey, Lorenzo D.	307 West Hale, Osceola 72370.	563-6242
FP.....	Osborne Merrill J.	527 North Sixth, Blytheville 72315.	763-8118
FP.....	Polk, Joe T.	Keiser 72351	526-2121
FP.....	Pollock, George D.	608 West Lee, Osceola 72370.	563-2608
PD.....	Rainwater, W. T.	527 North Sixth, Blytheville 72315.	763-8118
FP.....	Rhodes, R. F.	608 West Lee, Osceola 72370.	563-2608
FP.....	Rodman, Tasker N.	Box 260, Leachville 72438.	539-6337
GS.....	Saliba, Norman R.	515 West Lee Street, Osceola 72370.	563-5279
FP.....	Shaneyfelt, E. A.	P. O. Box 468, Manila 72442.	561-4421
GS.....	Sims, Hunter C., Jr.	525 North 10th Street, Blytheville 72315.	763-0521
FP.....	Sims, Hunter, C., Sr.	1111 West Ash, Blytheville 72315 (Res.)	762-2886
GS.....	Utley, Francis E.	515 North 6th Street, Blytheville 72315.	763-4575
EENT.....	Webb, James Jackson.	520 West Main, Blytheville 72315.	762-2131
OBG.....	Workman, W. W.	527 North Sixth, Blytheville 72315.	763-8118
MONROE COUNTY			
FP.....	Dalton, Marvin L.	110 South Main Street, Brinkley 72021.	734-4161
FP.....	David, N. C., Jr.	108 West Ash, Brinkley 72021.	734-2212
FP.....	McKnight, Ed D.	Brinkley Bank Building, Brinkley 72021.	734-4234
FP.....	Pupsta, Benedict F.	P. O. Box 432, Clarendon 72029.	747-3321
FP.....	Stone, Herd E.	P. O. Box A, Holly Grove 72069.	462-3393
FP.....	Walker, Walter L.	114 South New Orleans, Brinkley 72021.	734-3242
FP.....	Williams, J. P., Jr.	127 South New Orleans, Brinkley 72021.	734-1331
NEVADA COUNTY			
FP.....	Avery, Charles D.	427 East 6th, Prescott 71857.	887-2625
FP.....	Crow, H. Blake.	327 East Second, Prescott 71857.	887-3846
FP.....	Hairston, G. G.	317 East Third, Prescott 71857.	887-2211
FP.....	Harrell, L. J.	117 East Second, Prescott 71857.	887-2312
	Hesterly, Charles A.	Honokaa, Hawaii	

Type of Practice	Member's Name	Address	Telephone Number
OUACHITA COUNTY			
FP	Colyar, Willis O., Jr.	416 Hospital Drive, S.W., Camden 71701	836-6851
FP	Dalton, Perry J.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Dedman, J. L., Jr.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Drewrey, Lawrence E.	Post Office Box 978, Camden 71701	836-6811
	*Ellis, Bruce	Stephens	
ANES	Ellis, Joseph L.	P. O. Box 126, Camden 71701	836-7144
GS	Fohn, Charles H.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Guthrie, James	530 Jefferson Street, S.W., Camden 71701	836-5058
FP	Hawley, James W.	P. O. Box 38, Camden 71701	836-5710
FP	Hout, Judson N.	530 Jefferson, S.W., Camden 71701	836-5058
GS	Jameson, J. B.	110 Harrison, S.W., Camden 71701	836-5088
FP	Killough, Larry R.	530 Jefferson, S.W., Camden 71701	836-5058
FP	Lewis, Roscoe C.	P. O. Box 675, Camden 71701	836-5753
FP	Livingston, Bill B.	430 Magnolia Road, Camden 71701	836-6811
FP	Meek, Tom J.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Miller, John H.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Ozment, L. V.	530 Jefferson, S.W., Camden 71701	836-5058
R	Thorne, Arthur E.	Ouachita Hospital, Camden 71701	836-9323
PHILLIPS COUNTY			
FP	Barrow, John H.	614 Oakland Avenue, Helena 72342	338-8622
FP	Bell, L. J. Patrick	626 Poplar, Helena 72342	338-8163
EENT	Berger, Alfred A.	801 Perry, Helena 72342	338-8781
R	Biggs, William W.	Helena Hospital, Helena 72342	338-6411
RD	Bufts, James W.	708 McDonough, Helena 72342 (Res.)	338-8006
FP	Capes, Bernard	130 Plaza Street, West Helena 72390	572-2621
FP	Chrestman, Reuben L., Jr.	631 Oakland Avenue, Helena 72342	338-3294
FP	Ellis, William A.	603 Porter, Helena 72342	338-3037
FP	Faulkner, H. N.	513 Porter, Helena 72342	338-7401
P	Goodin, Walker D.	P. O. Box 673, Helena 72342	338-6715
FP	Hill, William K.	P. O. Box 277, Elaine 72333	827-3461
FP	Kirkman, C. M. T.	1105 Perry, Helena 72342	338-8712
	*Kurts, Evan J.	West Helena	
FP	Miller, Robert Dan, Jr.	616 Elm Street, Helena 72342	338-8531
FP	McCarty, C. P.	513 Porter, Helena 72342	338-7401
FP	McDaniel, M. A.	513 Porter, Helena 72342	338-7401
FP	Oldham, H. B.	P. O. Box 2538, West Helena 72390	572-7581
FP	Paine, W. T.	671 Oakland, Helena 72342	572-6413
FP	Tonymon, Daniel	P. O. Box 278, Marvell 72366	829-2721
FP	Wise, James E., Jr.	P. O. Box 66, Marvell 72366	829-2386
POLK COUNTY			
FP	Austin, Calvin D.	1210 DeQueen, Mena 71953	394-1441
FP	Hefner, David P.	518 Janssen, Mena 71953	394-3550
FP	Redman, Pierre	513 Mena Street, Mena 71953	394-2277
FP	Rogers, Henry N.	600 West Seventh Street, Mena 71953	394-3344
GS	Wood, John P.	907 Mena Mena 71953	394-4221
POPE-YELL COUNTY			
FP	Ashcraft, Ted E.	809 West Main, Russellville 72801	967-2156
GS	Bachman, David S.	3005 West Main Place, Russellville 72801	968-2345
ANES	Birum, Patricia J.	Route 1, Box 333, London 72847	293-4249
FP	Carter, James M.	3005 West Main Place, Russellville 72801	968-2345
FP	Draege, Louis A.	Danville 72833	495-2252
IM	Franklin, Robert M.	3005 West Main Place, Russellville 72801	968-2345
OPH	Gardner, Ellis	112 North El Paso, Russellville 72801	968-2242
O8G	Gardner, Joseph A.	3005 West Main Place, Russellville 72801	968-2345
FP	Gavlas, Frank E.	310 North Second, Dardanelle 72834	229-4225
IM	Hansen, Thomas L.	3005 West Main Place, Russellville 72801	968-2345
FP	Harbison, James D.	505 Union, Dardanelle 72834	229-4172
FP	Harris, Walter P.	P. O. Box 487, Danville 72833	495-2714
ADM	Heidgen, Martin F.	St. Mary's Hospital, Russellville 72801	968-2841
FP	Henry, J. Arnold	3005 West Main Place, Russellville 72801	968-2345
FP	King, William E., Jr.	3005 West Main Place, Russellville 72801	968-2345
OR	Kolb, James M., Jr.	P. O. Box 380, Clarksville 72830	754-2007
FP	Lane, Walter H., Jr.	625 Water Street, Dover 72837	331-2828
OPH	Lovell, Richard K., Jr.	P. O. Box 400, Russellville 72801	968-2242
FP	Lowrey, Douglass H.	809 West Main, Russellville 72801	967-2156
FP	Luker, Jerome H.	505 Union, Dardanelle 72834	229-4172
FP	Malone, George E.	733 West Main, Atkins 72823	641-2992
FP	Martin, Damon G. H.	P. O. Box 328, Ola 72853	489-5801
FP	Maupin, James L.	505 Union Street, Dardanelle 72834	229-4172
FP	Millard, Roy I.	3005 West Main Place, Russellville 72801	968-2345
OPH	Mobley, Max J.	111 North El Paso Street, Russellville 72801	968-2242
RD	McNamara, William L.	Sparks Manor, Fort Smith 72901 (Res.)	NF
FP	New, Kenneth	3005 West Main Place, Russellville 72801	968-2345
FP	Pennington, James O.	Ola 72853	489-5241
FP	Ring, Gene D.	505 Union, Dardanelle 72834	229-4172
FP	Teeter, Brooks R.	500 South Glenwood, Russellville 72801	967-4545
FP	Teeter, Stanley D.	3005 West Main Place, Russellville 72801	968-2345
FP	Webb, Lewis A.	314 North Second, Dardanelle 72834	229-3329
IM	Wilkins, Charles F., Jr.	3005 West Main Place, Russellville 72801	968-2345
FP	Williams, David M.	809 West Main, Russellville 72801	967-2156
PULASKI COUNTY			
ANES	Abbott, William W.	St. Vincent Infirmary, Little Rock 72201	661-3635
IM	Abernathy, Robert S.	4301 West Markham, Little Rock 72205	664-5000
IM	Abraham, James H.	900 North University, Little Rock 72207	664-3600
NS	Adamez, John H.	1026 Donaghey Building, Little Rock 72201	375-5547
OR+	Alberty, Joe P.	4301 West Markham, Little Rock 72205	664-5000
OPH	Alford, Dale	5700 West Markham, Little Rock 72205	664-5100
O8G	Allen, E. Stewart	417 North University, Little Rock 72205	664-2585
RD	Allen, Hoyt R.	44-C Rivercliff Apartments, Little Rock 72205 (Res.)	663-3896
TS	Allen, John E.	5512 West Markham, Little Rock 72205	664-1000
PS	Allen, Thomas H. "Bill"	413 North University, Little Rock 72205	663-9595
GS	Armstrong, Howard M.	12th and Bishop, Little Rock 72202	372-5626
RD	Ault, Charles C.	1810 West Long 17th Street, North Little Rock 72114 (Res.)	374-0748
PD	Austin, Lester K., Jr.	6213 Lee Avenue, Little Rock 72205	664-4044
RD	Autry, Daniel H.	1900 North Tyler, Little Rock 72207 (Res.)	664-2332
OTO+	Aycock, Alan E.	4301 West Markham, Little Rock 72205	664-5000
GS	Baber, John C., Jr.	500 South University, Little Rock 72205	664-2434
GS+	Baggett, Ronald W.	4301 West Markham, Little Rock 72205	664-5000

Type of Practice	Member's Name	Address	Telephone Number
OTO	Bailey, H. A. Ted, Jr.	1610 West Third Street, Little Rock 72201	372-1811
U	Baker, Johnson J.	500 South University, Little Rock 72205	664-4365
PD	Baldwin, Deane G.	6213 Lee Avenue, Little Rock 72205	664-4044
I	Ballard, Clarence E., Jr.	1700 West 13th Street, Little Rock 72202	374-3351
OBG	Barclay, David L.	4301 West Markham, Little Rock 72205	664-5000
ANES	Barnhard, Fay M.	1120 Marshall, Little Rock 72202	374-9568
R	Barnhard, Howard J.	4301 West Markham, Little Rock 72205	664-5000
FP	Barron, Edwin N., Jr.	7915 Cantrell Road, Little Rock 72207	225-9222
IM	Bates, Joseph H.	300 East Roosevelt Road, Little Rock 72206	372-8361
GS	Bauer, Frank M.	500 South University, Little Rock 72205	664-2245
R	Bearden, James R.	1700 West 13th Street, Little Rock 72202	374-3351
ANES+	Beasley, Margaret D.	4301 West Markham, Little Rock 72205	664-5000
OPH	Becquet, Norbert J.	115 West Sixth Street, Little Rock 72201	375-4419
FP	Belknap, Melvin L.	1801 Maple, North Little Rock 72114	758-1002
I	Bellas, Richard C.	1700 West 13th, Little Rock 72201	374-3351
P	Bennett, Eaton W.	4313 West Markham, Little Rock 72205	666-0181
PD	Berry, Daisilee H.	4301 West Markham, Little Rock 72205	664-5000
GS	Berry, Frederick B.	500 South University, Little Rock 72205	666-0222
P	Betts, Charles S.	500 South University, Little Rock 72205	663-9169
GS+	Bevans, David W.	4301 West Markham, Little Rock 72205	664-5000
ANES	Beverly, Nolan F.	St. Vincent Infirmary, Little Rock 72201	661-3578
D	Biondo, Raymond V.	406 West 26th Street, North Little Rock 72114	758-2588
CD	Bishop, William B.	900 North University, Little Rock 72207	664-3600
FP	Bizzell, Ross	215 Exchange Building, Little Rock 72201	376-2309
U	Black, Hal R., Jr.	615 University Tower Building, Little Rock 72204	664-4200
FP	Black, Millard W.	705 North Ash, Little Rock 72205	663-5413
RD	Blakely, R. M.	211 Crystal Court, Little Rock 72205 (Res.)	663-2562
P+	Blaylock, Jerry D.	4301 West Markham, Little Rock 72205	664-5000
GS+	Bledsoe, James H.	4301 West Markham, Little Rock 72205	664-5000
N	Boellner, Samuel W.	4301 West Markham, Little Rock 72205	664-5000
NS	Boop, Warren C., Jr.	4301 West Markham, Little Rock 72205	664-5000
PD	Bornhofen, John H.	4301 West Markham, Little Rock 72205	664-5000
ADM	Bost, Roger B.	406 National Old Line Building, Little Rock 72201	371-1001
OR	Bowker, John H.	4301 West Markham, Little Rock 72205	664-5000
P	Boyle, Ronald H.	1201 Bishop, Little Rock 72202	374-7467
U	Bradburn, Curry B., Jr.	615 University Tower Building, Little Rock 72204	664-4200
R	Brenner, George H.	1120 Marshall, Little Rock 72202	376-6241
PD	Briggs, Barney P.	500 South University, Little Rock 72205	664-4117
PD	Briggs, Dale D.	1210 Look Street, Little Rock 72204	666-0326
IM	Brinkley, Roy A.	1111 Bishop, Little Rock 72202	375-1177
OTO	Brizzolara, A. J.	500 South University, Little Rock 72205	664-4381
P	Broach, R. Fred	1201 Bishop, Little Rock 72202	374-7467
RD	Brown, Martha M.	2014 Boulevard, Little Rock 72204 (Res.)	663-7697
U	Brown, T. Duel	1120 Marshall, Little Rock 72202	375-3376
GE	Browning, Donald G.	409 North University, Little Rock 72205	664-6980
GS	Buchanan, Francis R.	500 South University, Little Rock 72205	664-4324
PD	Buchanan, Gilbert A.	500 South University, Little Rock 72205	664-4117
GS	Buchman, Joseph A.	500 South University, Little Rock 72205	666-0222
ANES	Bumpas, Joe H.	St. Vincent Infirmary, Little Rock 72201	661-3000
PATH	Burger, Robert A.	1700 West 13th Street, Little Rock 72202	374-3351
P	Busby, John V.	1201 Bishop, Little Rock 72202	374-7467
ANES	Byrd, Lucas M., Jr.	36 Lakeshore Drive, Little Rock 72204	565-6046
OPH	Calcote, Robert A.	Donaghey Building, Little Rock 72201	374-5969
GS	Caldwell, Fred T., Jr.	4301 West Markham, Little Rock 72205	664-5000
R	Calhoun, Joseph D.	500 South University, Little Rock 72205	664-3914
TS	Campbell, Gilbert S.	4301 West Markham, Little Rock 72205	664-5000
R	Campbell, James W.	500 South University, Little Rock 72205	664-3915
OPH	Cannon, R. Joe	516 Scott, Little Rock 72201	374-6338
A	Caplinger, Kelsy J.	4001 West Capitol, Little Rock 72205	664-1596
P	Carnahan, Robert G.	4313 West Markham, Little Rock 72205	666-0181
RD	Carruthers, F. Walter	Westmont Apartments, Little Rock 72207 (Res.)	663-2181
RD	Cazort, Alan G.	5117 Edgewood, Little Rock 72207 (Res.)	663-3623
OR	Chakales, Harold H.	401 North University, Little Rock 72205	664-1500
OPH	Chandler, Billy M.	406 West Pershing, North Little Rock 72114	758-1651
P	Chappell, Ewin S.	4313 West Markham, Little Rock 72205	666-0961
FP	Cheairs, D. B.	1624 Maryland, Little Rock 72202	374-2272
RD	Choate, Hoyt L.	1100 Kavanaugh, Little Rock 72205 (Res.)	663-4362
U	Christeson, William W.	300 East Roosevelt Road, Little Rock 72206	372-8361
OR	Christian, John D.	5520 West Markham, Little Rock 72205	666-9431
FP	Chudy, Amai	1801 Maple, North Little Rock 72114	758-1002
FP	Church, Beresford L.	321 Maple, North Little Rock 72114	374-7796
OBG	Church, Marion M.	410 Pershing, North Little Rock 72114	758-1022
ANES	Clark, Richard B.	4301 West Markham, Little Rock 72205	664-5000
FP	Cobb, Jock S.	North Hills Family Clinic, Sherwood 72116	835-6800
P	Conroy, Norma H.	320 West 20th, Little Rock 72206	374-8427
OPH	Cook, Raymond C.	601 Scott Street, Little Rock 72201	375-8273
PD	Cooper, James O.	4301 West Markham, Little Rock 72205	664-5000
GS	Cooper, W. G.	500 South University, Little Rock 72205	666-0149
RD	Cope, Ellis P.	1714 North Palm, Little Rock 72207 (Res.)	663-2208
GYN	Cornell, Paul J.	432 Donaghey Building, Little Rock 72201	375-7228
FP	Cornett, James K.	5326 West Markham, Little Rock 72205	NF
OPH	Cosgrove, K. W., Jr.	516 Scott Street, Little Rock 72201	374-6338
CR	Craig, Marion S.	500 South University, Little Rock 72205	666-0106
OBG	Crews, J. Travis	417 North University, Little Rock 72205	664-2585
OPH	Cross, J. B.	500 South University, Little Rock 72205	666-0126
	*Cull, S. T. W.	Little Rock	
IM	Cullen, Philip T.	500 South University, Little Rock 72205	664-4171
RD	Cummins, Bryce	31 Broadmoor Drive, Little Rock 72204 (Res.)	565-7450
FP	Cutler, Otis E.	5512 West Markham, Little Rock 72205	664-7075
R	Dalrymple, Glenn V.	4301 West Markham, Little Rock 72205	664-5000
FP	Darwin, William G.	6924 Geyer Springs Road, Little Rock 72209	562-1463
OTO+	Davie, Steven A.	4301 West Markham, Little Rock 72205	664-5000
GS	Dean, Gilbert O.	403 Donaghey Building, Little Rock 72201	375-5543
PD	Decker, Harold A.	4301 West Markham, Little Rock 72205	664-5000
R	Deed, Eleanor P.	4301 West Markham, Little Rock 72205	664-5000
OPH	Deer, Philip J., Jr.	601 Scott Street, Little Rock 72201	375-8273
ADM	Dennis, James L.	4301 West Markham, Little Rock 72205	663-3482
CD+	deSoyza, Neil D. B.	300 East Roosevelt Road, Little Rock 72206	372-8361
NS	Dickins, Robert D., Jr.	1026 Donaghey Building, Little Rock 72201	375-5547
PATH	Dilday, Thomas F., Jr.	500 South University, Little Rock 72205	666-0381
IM	Dildy, Hal R.	508 Donaghey Building, Little Rock 72201	374-8633
R	Diner, Wilma C.	4301 West Markham, Little Rock 72205	664-5000
R	Dodd, Doayne, Jr.	4301 West Markham, Little Rock 72205	664-5000
OBG	Dodge, Eva F.	4815 West Markham, Little Rock 72205	661-2242

Type of Practice	Member's Name	Address	Telephone Number
GS	Downs, J. W.	500 South University, Little Rock 72205	666-5922
U	Downs, Ralph A.	119 North Van Buren, Little Rock 72205	664-1762
ANES	Dulaney, Frank M., Jr.	1122 Marshall, Little Rock 72202	374-9568
OR+	Duncan, Jan W.	4301 West Markham, Little Rock 72205	664-5000
PD	Dungan, William T.	4301 West Markham, Little Rock 72205	664-5000
FP	Durham, James W.	112 North Bailey, Jacksonville 72076	982-2125
P	Eardley, Robert J.	Post Office Box 3685, Little Rock 72203	371-1921
PM	Easley, Edgar J.	4815 West Markham, Little Rock 72205	661-2121
OR	Easter, Rex M.	601 North University, Little Rock 72205	666-0145
HEMA	Eberle, W. Gilbert, II	900 University Tower Building, Little Rock 72204	664-5884
FP	Evans, Gilbert C.	4942 West Markham, Little Rock 72205	664-4127
FP	Farmer, Joseph F.	9501 Rodney Parham Road, Little Rock 72207	225-2594
FP	Farris, Guy R., Jr.	6213 Lee Avenue, Little Rock 72205	664-2115
OTO	Fein, Norman N.	520 Walden Building, Little Rock 72201	374-8441
FP	Fewell, Ronald D.	Post Office Box 459, Jacksonville 72076	982-2141
GS	Fielder, C. R.	406 Pershing, North Little Rock 72114	758-1620
FP	Fitzgibbon, Carney, Jr.	410 South Martin, Little Rock 72205	666-8861
FP	Flack, James V.	424 North University, Little Rock 72205	664-4810
NS	Flanigan, Stevenson	4301 West Markham, Little Rock 72205	664-5000
NEPH	Flanigan, William J.	4301 West Markham, Little Rock 72205	664-5000
P	Fletcher, Elizabeth	4313 West Markham, Little Rock 72205	666-0181
NS	Fletcher, Thomas M.	500 South University, Little Rock 72205	664-3021
O8G	Floyd, Bill G.	1018 University Tower Building, Little Rock 72204	664-7272
FP	Foster, Julian L.	3500 South University, Little Rock 72204	562-4838
U	Fraiser, Lacy P.	615 University Tower Building, Little Rock 72204	664-4200
O8G+	Fraser, James H.	4301 West Markham, Little Rock 72205	664-5000
OPH	Fraunfelder, F. T.	4301 West Markham, Little Rock 72205	664-5000
ANES+	Friday, Cheryl D.	4301 West Markham, Little Rock 72205	664-5000
D	Fulmer, H. Ray	1414 Donaghey Building, Little Rock 72201	374-1649
OPH	Fulmer, John M.	5410 West Markham, Little Rock 72205	664-3142
IM	Fulton, William L.	513 Main, North Little Rock 72114	375-2433
R	Garrison, James S., Jr.	Conway Memorial Hospital, Conway 72032	329-3831
OTO	Gay, Ellery C., Jr.	5326 West Markham, Little Rock 72205	664-1118
PD	Gibbins, Jack	#17 Sherrill Road, Little Rock 72207	663-7909
NS+	Giles, Wilbur M.	4301 West Markham, Little Rock 72205	664-5000
O8G	Gillespie, A. Tharp	500 South University, Little Rock 72205	664-3838
PD	Glenn, Robert E.	516 West Pershing, North Little Rock 72114	758-1530
ANES	Glenn, Wayne B.	4301 West Markham, Little Rock 72205	664-5000
R	Glover, William C.	1612 Maryland, Little Rock 72202	374-3351
PATH+	Golleher, James H.	4301 West Markham, Little Rock 72205	664-5000
P	Good, Henry H.	12th and 8th, Little Rock 72202	374-7467
PDA	Gordon, Vida H.	1301 West Markham, Little Rock 72205	664-5000
PD	Gosser, Bob L.	516 West Pershing, North Little Rock 72114	758-1530
TS	Graham, G. Grimsley	5322 West Markham, Little Rock 72205	663-9433
IM	Graupner, Kathryn I.	VA Hospital, North Little Rock 72114	372-8361
R	Gray, Edwin F.	500 South University, Little Rock 72205	664-3914
ANES	Greifenstein, Ferdinand E.	4301 West Markham, Little Rock 72205	664-5000
IM	Greutter, John E.	1012 Donaghey Building, Little Rock 72201	372-6139
OR	Grimes, H. Austin	Post Office Box 5270, Little Rock 72206	666-9491
GS	Growdon, James H.	500 South University, Little Rock 72205	664-4146
NS+	Gupta, Surinder N.	4301 West Markham, Little Rock 72205	664-5000
O8G	Hagler, James L.	500 South University, Little Rock 72205	664-4377
IM	Hall, Alastair D.	500 South University, Little Rock 72205	664-0027
IM	*Hamilton, Wilburn M.	Little Rock	
PH	Harper, Ernest H.	400 Pershing Boulevard, North Little Rock 72114	758-2290
FP	Harrel, John A., Jr.	1815 West Markham, Little Rock 72205	661-2147
FP	Harrendorf, Cagle	4301 West Markham, Little Rock 72205	664-5000
IM	Harris, Michael N.	400 West Pershing, North Little Rock 72114	664-3600
R	Harris, William T.	500 South University, Little Rock 72205	664-3914
P	Harrison, A. Vale	110 East 7th, Little Rock 72201	374-3815
FP	Harrison, Roy E.	8824 Chicot Road, Little Rock 72209	562-8600
PATH	Harville, William E.	1700 West 13th Street, Little Rock 72201	374-3351
P	Hawley, H. B.	538 Donaghey Building, Little Rock 72201	375-4111
GS	Hayden, William F.	500 South University, Little Rock 72205	664-2434
PS	Hayes, Harry, Jr.	500 South University, Little Rock 72205	666-2811
R	Haynes, W. Ducote	500 South University, Little Rock 72205	664-3914
U	Headstream, James W.	500 South University, Little Rock 72205	664-4364
P	Hearnsberger, Henry G.	4313 West Markham, Little Rock 72205	666-0961
FP	Hedges, Harold H.	814 North University, Little Rock 72205	663-9474
A	Hefley, Bill F.	4001 West Capitol, Little Rock 72205	664-1596
P	Henker, Fred O. III.	4301 West Markham, Little Rock 72205	664-5000
GYN	Henry, Charles R.	500 South University, Little Rock 72205	664-4191
N	Henry, G. Morrison	900 North University, Little Rock 72207	664-3600
OPH	Henry, J. Forrest, Jr.	516 Scott, Little Rock 72201	374-6338
PD	Henry, Robert L.	6213 Lee Avenue, Little Rock 72205	664-4044
PH	Herron, John T.	4815 West Markham, Little Rock 72205	661-2111
ANES	Hickey, Joseph P.	P. O. Box 7573 Little Rock 72207	664-2496
FP	Hodoes, William B.	1800 Maple, North Little Rock 72114	758-1450
FP	Holitic, George F.	3200 Bryant, Little Rock 72204	562-5556
GS	Hollenberg, Henry G.	500 South University, Little Rock 72205	664-4747
P	Hollis, Nicholas T.	Post Office Box 4042, Little Rock 72204	664-3926
D+	Holloway, Joel E.	4301 West Markham, Little Rock 72205	664-5000
FP	Holmes, Harlan C.	1120 Marshall, Little Rock 72202	372-5040
GS	Holt, L. Gordon	5326 West Markham, Little Rock 72205	666-9442
FP	Honeycutt, Thomas D.	4124 West 11th Street, Little Rock 72204	664-4389
D	Honeycutt, W. Mage	500 South University, Little Rock 72205	664-4161
GS	Hoover, Paul W.	1120 Marshall, Little Rock 72202	374-0789
ANES+	House, James R., Jr.	4301 West Markham, Little Rock 72205	664-5000
P	Howard, John G., Jr.	500 South University, Little Rock 72205	663-1120
ANES	Hudgins, Paul T.	1120 Marshall, Little Rock 72202	372-7502
OR	Hundley, John M.	412 Cross Street, Little Rock 72201	375-5338
OR	Hutson, Harold G.	1000 Wolfe, Little Rock 72202	375-2446
ADM	Jackson, George W.	4313 West Markham, Little Rock 72205	666-0181
FP	Jackson, Morris A.	1304 Wright Avenue, Little Rock 72206	374-7940
D	Jansen, G. Thomas	500 South University, Little Rock 72205	664-4161
IM	Jennings, Ralph H., Jr.	Lakeland, Florida	
FP	Johnson, Henry D.	500 South University, Little Rock 72205	664-4171
OR	Johnson, James A.	112 North Bailey, Jacksonville 72076	982-2125
A	Johnson, Philip H.	Post Office Box 5270, Little Rock 72206	666-9491
FP+	Johnston, Thomas G.	5326 West Markham, Little Rock 72205	664-3904
PD	Jones, Edwin C.	St. Vincent Infirmary, Little Rock 72201	661-3976
OR	Jones, Jerry G.	1210 Look Street, Little Rock 72204	666-0326
OR	Jones, Kenneth G.	P. O. Box 5270, Little Rock 72206	666-9491
GS	Jones, Robert D.	500 South University, Little Rock 72205	664-4747

Type of Practice	Member's Name	Address	Telephone Number
D	Jones, William N.	500 South University, Little Rock 72205	664-0418
R+	Jordan, Billy J.	1700 West 13th, Little Rock 72201	374-3351
N	Jordan, William K.	500 South University, Little Rock 72205	663-6353
NS	Jouett, W. Ray	1026 Donaghey Building, Little Rock 72201	375-5547
R	Joyce, John W.	1700 West 13th Street, Little Rock 72202	374-3351
IM	Juniper, Kerrison, Jr.	4301 West Markham, Little Rock 72205	664-5000
RD	Junkin, Ruth H.	5321 J. F. Kennedy Blvd., North Little Rock 72116 (Res.)	753-9370
FP	Kagy, John K.	8609 West Markham, Little Rock 72205	225-2591
IM	Kahn, Alfred, Jr.	1300 West 6th Street, Little Rock 72201	374-5589
D	Keeran, Michael G.	500 South University, Little Rock 72205	664-4161
FP	Kennedy, Charles H.	3115 J. F. Kennedy Blvd., North Little Rock 72116	753-9464
PD	Kennedy, H. Frazier	500 South University, Little Rock 72205	664-4117
PH	Kennedy, Jack W.	4815 West Markham, Little Rock 72205	661-2140
GS	Kilbury, Merlin J., Jr.	500 South University, Little Rock 72205	664-1322
RD	Kilbury, Merlin J., Sr.	6109 Greenwood Road, Little Rock 72207 (Res.)	663-5213
FP	Kirby Jesse M.	6924 Baucum Pike, North Little Rock 72117 (Res.)	945-3055
A	Kittler, Frederick J.	4001 West Capitol, Little Rock 72205	664-1596
ANES	Kolb, Agnes C.	1612 Maryland, Little Rock 72202	372-3491
P	Kolb, W. Payton	1120 Marshall, Little Rock 72202	372-3325
P	Kozberg, Oscar	4313 West Markham, Little Rock 72205	666-0181
OBG	Kreth, Kay M.	5800 West Markham, Little Rock 72205	663-9441
GS	Kumpuris, Frank G.	415 North University, Little Rock 72205	664-1521
TS	Kuykendall, Sam J.	500 South University, Little Rock 72205	664-2736
OTO	Kyser, James F.	4942 West Markham, Little Rock 72205	663-9423
RD	Lamb, William A.	4001 West 11th Street, Little Rock 72204 (Res.)	663-1452
R	Lane, John W.	1700 West 13th Street, Little Rock 72202	374-3351
R	Langston, Harold D.	1700 West 13th Street, Little Rock 72202	374-3351
CR	Laurens, John	501 North University, Little Rock 72205	664-0390
FP	Laurenzana, Donald A.	North Hills Family Clinic, Sherwood 72116	835-6800
PH	Lawson, Mason G.	701 West Markham, Little Rock 72201	376-6111
R+	Leavelle, Ray W.	4301 West Markham, Little Rock 72205	664-5000
OR+	Ledbetter, Charles A.	4301 West Markham, Little Rock 72205	664-5000
A	Lee, J. Fred	5326 West Markham, Little Rock 72205	664-3904
FP	Leonard, Garnett J.	3115 J. F. Kennedy Blvd., North Little Rock 72116	753-9464
OR	Lester, Joe K.	1518 Main, North Little Rock 72114	375-0102
IM	Levy, Jerome S.	500 South University, Little Rock 72205	664-4181
CD	Lewis, W. Sexton	900 North University, Little Rock 72207	664-3600
TS	Lincoln, Ben M.	5322 West Markham, Little Rock 72205	663-9433
U	Logan, Charles W.	500 South University, Little Rock 72205	664-4364
OR	Logue, Richard M.	601 North University, Little Rock 72205	666-0144
FP	Longstreth, Alvin E.	1312 Fair Park Blvd., Little Rock 72204	663-5545
N	Lucas, George J.	300 East Roosevelt Road, Little Rock 72206	372-8361
N	Lucy, Dennis D., Jr.	4301 West Markham Little Rock 72205	664-5000
GS	Ludwig, Frank R.	406 West Pershing, North Little Rock 72114	758-1620
GS+	Lyons, Virgle E., Jr.	4301 West Markham, Little Rock 72205	664-5000
FP	Mallory, George L., Jr.	4511 Lynch Drive, North Little Rock 72117	945-9271
IM	Massey, C. Garnett	900 North University, Little Rock 72207	664-3600
P	Matthews, Robert R.	4301 West Markham, Little Rock 72205	664-5000
ANES	Means, Paul N.	1120 Marshall, Little Rock 72202	374-7350
NS	Miles, David A.	912 University Tower Building, Little Rock 72204	664-3018
OR	Millard, I. Leighton	12th and Van Buren, Little Rock 72205	666-9491
IM	Miller, C. Lindsey	900 North University, Little Rock 72207	664-3600
FP	Miller, Forrest B., Jr.	3500 South University, Little Rock 72204	562-4838
	Miller, Harold N.	Port Charlotte, Florida	
IM	Miller, Raymond P., Sr.	5918 Lee Avenue, Little Rock 72205	664-2500
OTO	Milner, E. L.	500 South University, Little Rock 72205	664-4318
ADM	Mitchell, George K.	Post Office Box 2181, Little Rock 72203	374-7401
N+	Mitchell, Ord J.	4301 West Markham, Little Rock 72205	664-5000
U	Mobley, Jack E.	4301 West Markham, Little Rock 72205	664-5000
	*Molholm, Hans B.	Little Rock	
NS	Moore, Jim J.	500 South University, Little Rock 72205	666-5466
U	Moore, J. Malcolm	500 South University, Little Rock 72205	664-4364
GS	Moore, Rex M.	813 Marshall Road, Jacksonville 72076	982-2141
IM	Moore, Robert B.	5918 Lee Avenue, Little Rock 72205	664-2500
OBG	Morgan, Frank E.	410 Pershing, North Little Rock 72114	758-1022
IM	Morris, Woodbridge E.	5326 West Markham, Little Rock 72205	664-2111
R	Morrison, James R.	500 South University, Little Rock 72205	664-3914
FP	Murphy, James E.	1800 Maple, North Little Rock 72114	758-1640
FP	Murphy, Randolph	4313 West Markham, Little Rock 72205	666-0181
R+	McAdoo, Hosea W., Jr.	1700 West 13th Street, Little Rock 72202	374-3351
OBG	McCaskill, Melvin R.	500 South University, Little Rock 72205	664-4131
R+	McClain, Charles M., Jr.	4301 West Markham, Little Rock 72205	664-5000
FP	McClain, Monroe D.	1120 Marshall, Little Rock 72202	374-7484
OBG	McClintock, Everett M.	712 University Tower Building, Little Rock 72204	664-0480
GS	McCracken, John D.	5512 West Markham Little Rock 72205	664-1000
FP	McCravy, George A.	112 North Bailey, Jacksonville 72076	982-4551
OBG	McGinnis, Max R.	500 South University, Little Rock 72205	664-4131
I	McGowan, Robert J., Jr.	St. Vincent Infirmary, Little Rock 72201	661-3635
OTO	McGrew, Robert N.	4301 West Markham, Little Rock 72205	664-5000
OR	McKenzie, Charles N.	802 North University, Little Rock 72205	666-0251
R	McKenzie, James G.	848 Adams Avenue, Memphis, Tennessee 38103	(901) 525-6541
OBG	McKnight, C. Allen	5805 West 12th Street, Little Rock 72204	666-0292
R+	McMillan, Donald E.	4301 West Markham, Little Rock 72205	664-5000
FP	McMillin, F. Lamar, Sr.	1311 Louisiana, Little Rock 72202	374-6531
	*McMillion, Stephen D.	North Little Rock	
OPH+	McNair, James R.	4301 West Markham, Little Rock 72205	664-5000
GS	McPhail, Jasper L.	1120 Marshall, Little Rock 72202	375-3747
FP	Napper, George S.	513 Main, North Little Rock 72114	375-2433
I	Nauss, Lee A.	4301 West Markham, Little Rock 72205	664-5000
R	Newbern, David H.	500 South University, Little Rock 72205	664-3914
RD	Nisbett, James M.	517 East 7th Street, Little Rock 72202 (Res.)	375-2252
OR	Nixon, Ewing M.	1000 Wolfe, Little Rock 72202	375-2446
R	Norton, Joseph A.	500 South University, Little Rock 72205	664-3914
FP	Oates, Gordon P.	1612 Maryland, Little Rock 72202	374-9332
FP	Ogden, Mahlon D.	4601 Woodlawn, Little Rock 72205	664-0769
P	Oglesby, Walter R.	324 West Pershing, North Little Rock 72114	753-5180
I	O'Neal, Barry L.	4301 West Markham Little Rock 72205	664-5000
IM	O'Neal, Walter H.	1111 Bishop Street, Little Rock 72202	375-1177
PATH	Orr, William S., Jr.	500 South University, Little Rock 72205	664-3043
PATH	Packmore, Dalton E.	500 South University, Little Rock 72205	664-3043
NS	Padberg, Frank T.	500 South University, Little Rock 72205	666-5466
OBG+	Pal, Nirmal K.	4301 West Markham Little Rock 72205	664-5000
OTO	Pappas, James J.	1610 West 3rd Street, Little Rock 72201	376-3651

Type of Practice	Member's Name	Address	Telephone Number
OPH+	Parker, J. Mayne	4301 West Markham, Little Rock 72205	664-5000
PC	Payne, William F.	4301 West Markham, Little Rock 72205	664-5000
P.	Pearce, Charles G.	VA Hospital, North Little Rock 72114	372-8361
PATH	Pehrson, Nils C.	500 South University, Little Rock 72205	666-0381
PATH+	Pesnell, Larkus H.	4301 West Markham, Little Rock 72205	664-5000
CP	Peters, John E.	4301 West Markham, Little Rock 72205	664-5000
OPH	Phillips, Bert L.	1403 Main, North Little Rock 72114	376-2840
PUD	Phillips, James R.	4301 West Markham, Little Rock 72205	664-5000
PD	Phillips, Samuel	615 Donaghey Building, Little Rock 72201	374-9534
GS	Phipps, Woodrow E.	Post Office Box 13, North Little Rock 72115	374-4821
GS	Pike, John D.	500 South University, Little Rock 72205	664-4321
ANES	Pollard, A. E.	St. Vincent Infirmary, Little Rock 72201	661-3578
R	Pool, Chalmers S.	VA Hospital, North Little Rock 72114	372-8361
O8G	Porter, James O.	500 South University, Little Rock 72205	664-3838
CD	Price, Ben O.	500 South University, Little Rock 72205	664-4166
IM	Pringos, Andrew A.	102 National Old Line Bldg., Little Rock 72201	375-3231
IM	Proctor, Clark B.	VA Hospital, North Little Rock 72114	372-8361
FP	Purdy, Harold D.	6924 Geyer Springs Road, Little Rock 72209	562-1463
IM	Pyle, Hoyte R., Jr.	5918 Lee, Little Rock 72205	664-2500
ANES	Quimby, Charles W.	4301 West Markham, Little Rock 72205	664-5000
PATH	Quittner, Howard	4301 West Markham, Little Rock 72205	664-5000
PD	Ramsay, Rex C.	4815 West Markham, Little Rock 72205	661-2242
FP	Raney, Donald M.	Post Office Box 459, Jacksonville 72076	982-2141
ANES+	Rapieiko, John A.	4301 West Markham, Little Rock 72205	664-5000
D	Rasch, James R.	900 North University, Little Rock 72207	664-3600
IM	Raque, Carl J.	500 South University, Little Rock 72205	664-4161
GS	Read, Raymond C.	300 East Roosevelt Road, Little Rock 72206	372-8361
O8G	Reaves, B. James	4815 West Markham, Little Rock 72205	661-2242
IM+	Rector, Nancy F.	4301 West Markham, Little Rock 72205	664-5000
U	Redman, John F.	4301 West Markham, Little Rock 72205	664-5000
FP	Reed, Ewing C., Jr.	1119 Bishop, Little Rock 72202	374-3716
P	Reese, William G.	4301 West Markham, Little Rock 72205	664-5000
R	Regnier, George G.	500 South University, Little Rock 72205	664-3914
R	Rhinehart, William J.	500 South University, Little Rock 72205	664-3914
TS	Richardson, Robert E.	500 South University, Little Rock 72205	664-4321
GS	Richmond, Samuel V.	927 Donaghey Building, Little Rock 72201	372-5101
R+	Riddick, Earl B., Jr.	4301 West Markham, Little Rock 72205	664-5000
FP	Riegler, Nicholas W., Jr.	1024 Scott Street, Little Rock 72202	375-3326
RD	Riegler, Nicholas W., Sr.	1024 Scott Street, Little Rock 72202	375-3326
R	Riggs, Orval E.	4301 West Markham, Little Rock 72205	664-5000
FP	Riley, William H.	3500 South University, Little Rock 72204	562-4838
FP	Ritchie, Elmer J.	1401 Main, North Little Rock 72114	372-5253
O8G	Rodgers, C. Dudley	500 South University, Little Rock 72205	664-4131
FP	Rodgers, Charles H.	3500 South University, Little Rock 72204	562-4838
O8G	Rodgers, Clyde D.	500 South University, Little Rock 72205	664-4131
OR	Rooney, Thomas P.	501 West 25th Street, North Little Rock 72114	758-2046
RD	Rosenbaum, Carl A.	Route 1, Scott 72142 (Res.)	961-9228
OR	Ross, Ashley S., Jr.	500 South University, Little Rock 72205	664-1222
O8G	Ross, Robert W.	417 North University, Little Rock 72205	664-2585
IM	Ross, S. William	900 North University, Little Rock 72207	664-3600
	Rothert, Frances C.	Guatemala City, Guatemala	
OTO	Rounsaville, Harry L.	500 South University, Little Rock 72205	664-4381
R+	Royal, Jack L.	4301 West Markham, Little Rock 72205	664-5000
PATH	Rozzell, Allen R.	500 South University, Little Rock 72205	664-3043
	Runnels, Gathel O.	Hattiesburg, Mississippi	
D+	Safley, Charles F., Jr.	4301 West Markham, Little Rock 72205	664-5000
FP	Samuel, John M.	5812 West Markham, Little Rock 72205	664-1544
OPH+	Sanchez-Humala, Juan	4301 West Markham, Little Rock 72205	664-5000
GYN	Sanderlin, Joe H.	432 Donaghey Building, Little Rock 72201	375-7228
TS	Satterfield, John V.	500 South University, Little Rock 72205	666-5488
P	Schneider, Mildred F.	VA Hospital, North Little Rock 72114	372-8361
FP	Schratz, Bruce	1801 Maple, North Little Rock 72114	758-1002
OPH+	Schroeder George T.	4301 West Markham, Little Rock 72205	664-5000
IM	Schultz, John C.	900 North University, Little Rock 72207	664-3600
GS	Schwander, Howard	1115 Bishop, Little Rock 72202	375-2366
OPH	Schwarz, W. J.	405 North University, Little Rock 72205	666-0333
R	Scruggs, Joe B.	1700 West 13th Street, Little Rock 72202	374-3351
OR	Selakovich, W. G.	500 South University, Little Rock 72205	666-2824
GS+	Sellers, John R.	4301 West Markham, Little Rock 72205	664-5000
	Sessoms, William D.	Amarillo, Texas	
P	Shannon, Robert F.	4301 West Markham, Little Rock 72205	664-5000
ADM	Shorey, Winston K.	4301 West Markham, Little Rock 72205	664-5000
OR	Shuffield, H. Elvin (Secretary)	1000 Wolfe, Little Rock 72202	375-2446
ADM	Silverblatt, Charles W.	500 University Tower Building, Little Rock 72204	664-5253
O8G	Simmons, Orman W.	1018 University Tower Building, Little Rock 72204	664-7272
IM	Simpson, N. Henry, Jr.	Donaghey Building, Little Rock 72201	375-2801
P+	Sims, James M.	4301 West Markham, Little Rock 72205	664-5000
I	Singleton, Louis G.	4301 West Markham, Little Rock 72205	664-5000
GS	Sipes, Frank M.	403 Donaghey Building, Little Rock 72201	375-5543
O8G	Sloan, James M.	500 South University, Little Rock 72205	664-3838
P	Smith, Aubrey C.	1201 Bishop, Little Rock 72202	374-7467
FP	Smith, Huie H.	1517 Main, North Little Rock 72114	374-7011
OPH	Smith, James L.	623 Woodlane, Little Rock 72201	374-6491
FP	Smith, John McCollough	4000 Woodlawn, Little Rock 72205	666-6570
OTO	Smith, John W.	1415 West 6th, Little Rock 72201	374-1622
GYN	Smith, Mose, III	5324 West Markham, Little Rock 72205	664-1527
A	Smith, Purcell, Jr.	4001 West Capitol, Little Rock 72205	664-1596
GE	Smith, Thomas J.	409 North University, Little Rock 72205	664-6980
PD	Smith, Thomas W.	500 South University, Little Rock 72205	664-4117
FP	Smith, W. Myers	3423 Pike, North Little Rock 72118	753-3661
RD	Snodgrass, William A., Jr.	8-A Quapaw Tower Apartments, Little Rock 72202 (Res.)	375-8463
GE	Sodeman, William A., Jr.	4301 West Markham, Little Rock 72205	664-5000
OR	Sorrells, R. Barry	Post Office Box 5270, Little Rock 72206	666-9391
R+	Speer, Marolyn N.	4301 West Markham, Little Rock 72205	664-5000
RD	Spitzberg, Irving J.	307 North Cedar, Little Rock 72205 (Res.)	663-6877
IM+	Spragins, Joel F.	4301 West Markham, Little Rock 72205	664-5000
FP	Soringer, Worthie R., Jr.	103 East 2nd, North Little Rock 72114	374-2635
GS	Stainton, Robert M.	500 South University, Little Rock 72205	664-4175
IM	Stanley, Joe P.	Pike Plaza Center, North Little Rock 72114	376-4023
RD	Stathakis, John A.	Quapaw Tower Apartments, Little Rock 72202	372-0098
OR	Steele, William L.	5520 West Markham, Little Rock 72205	666-9431
IM	Steinkamp, Ruth C.	500 University Tower Building, Little Rock 72204	664-5253
P	Stephens, Wanda J.	12A Quapaw Tower, Little Rock 72202	372-2998
TS	Stewart, Bill D.	415 North University, Little Rock 72205	664-1521

Type of Practice	Member's Name	Address	Telephone Number
FP	Stotts, John R.	5905 "R" Street, Little Rock 72207	663-9415
FP	Strauss, Alvin W., Jr.	110 East 7th Street, Little Rock 72201	372-1828
PD	Stroope, George F.	516 West Pershing, North Little Rock 72114	758-1530
PS	Stuckey, James G., Jr.	500 South University, Little Rock 72205	664-4383
OTO+	Suen, James Y.	4301 West Markham, Little Rock 72205	664-5000
I	Suiter, Daniel J.	4301 West Markham, Little Rock 72205	664-5000
P	Sundermann, Richard H.	4301 West Markham, Little Rock 72205	664-5000
PH	Swindoll, Bryant S.	4815 West Markham, Little Rock 72205	661-2124
OBG+	Talley, H. Aubry	4301 West Markham, Little Rock 72205	664-5000
IM	Taylor, Eugene H.	900 North University, Little Rock 72207	664-3600
RD	Taylor, James S.	4301 West Markham, Little Rock 72205	664-5000
PD	Teeter, John A.	5804 West Markham, Little Rock 72205	664-1767
GS	Thomas, Peter O.	1310 Cantrell Road, Little Rock 72201	374-5703
RD	Thomas, Philip E.	2601 Wolfe Street, Little Rock 72206	374-3425
GS	Thompson, Bernard W.	300 East Roosevelt Road, Little Rock 72206	372-8361
OR	Thompson, Lawrence L.	1310 Cantrell Road, Little Rock 72201	375-5381
P	Thompson, Robert M.	819 University Tower Building, Little Rock 72204	664-2444
OR	Thompson, Samuel B.	5520 West Markham, Little Rock 72205	666-9431
ADM	Thorn, G. Max	St. Vincent Infirmary, Little Rock 72201	661-3154
R	Tirman, Robert M.	300 East Roosevelt Road, Little Rock 72206	372-8361
IM	Tolbert, Louis E.	500 South University, Little Rock 72205	666-0136
FP	Tudor, John M., Jr.	St. Vincent Infirmary, Little Rock 72201	661-3976
U+	Turley, Jan T.	4301 West Markham, Little Rock 72205	664-5000
ANES	Valentine, Robert G.	1320 Marshall, Little Rock 72202	374-9568
ANES	Vaughter, W. Roger	1120 Marshall, Little Rock 72202	374-9568
FP	Wade, William I., Jr.	424 North University, Little Rock 72205	664-4810
IM	Wagoner, Jack	5918 Lee Avenue, Little Rock 72205	664-2500
GYN	Wallace, Deane D.	500 South University, Little Rock 72205	664-4377
PD	Wallis, Charles	5909 Country Club, Little Rock 72207 (Res.)	663-2132
GS	Walt, James R.	500 South University, Little Rock 72205	664-4146
ANES	Ward, Joseph P.	1120 Marshall, Little Rock 72202	372-7502
PD	Warford, Lloyd R.	6213 Lee Avenue, Little Rock 72205	664-4044
N	Warford, Walton R.	VA Hospital, North Little Rock 72114	372-8361
RD	Washburn, Arthur M.	510 North Brookside Drive, Little Rock 72205 (Res.)	225-5132
FP	Wassell, John R.	5301 Kavanaugh, Little Rock 72207	664-1525
OPH	Watkins, John G.	914 Donaghey Building, Little Rock 72201	372-7026
RD	Watson, C. Fletcher	106 South Maple Street, Little Rock 72205 (Res.)	NF
NS	Watson, Robert	1026 Donaghey Building, Little Rock 72201	375-5547
ANES	Weare, John L.	1120 Marshall, Little Rock 72202	374-9568
FP	Weber, James R.	1110 West Main, Jacksonville 72076	982-2108
IM	Wells, Travis L.	216 Donaghey Building, Little Rock 72201	375-7121
GS	Wenger, Carl E.	1624 Maryland, Little Rock 72202	374-2272
P	Westerfield, Frank M., Jr.	1120 Marshall, Little Rock 72202	374-6478
FP	White, Oba B.	200 Century Building, Little Rock 72201	374-3609
P	Whitehead, Robert H., Jr.	1102 Donaghey Building, Little Rock 72201	372-2960
PATH	Wilbur, E. Lloyd	1700 West 13th, Little Rock 72201	374-3351
FP	Wilkes, Elbert H.	5322 West Markham, Little Rock 72205	663-4114
CD	Williams, G. Doyné	4301 West Markham, Little Rock 72205	664-5000
ANES	Wilson, George E., Jr.	St. Vincent Infirmary, Little Rock 72201	661-3635
CD	Wilson, James W. D.	500 South University, Little Rock 72205	664-4166
OR	Wilson, John L.	601 North University, Little Rock 72205	666-0144
IM	Winn, Charles R., Jr.	1009 Wolfe, Little Rock 72202	375-5154
PD+	Worrell, Cynthia L.	4301 West Markham, Little Rock 72205	664-5000
FP	Wortham, Thomas H.	813 Marshall Road, Jacksonville 72076	982-2141
IM	Wynn, James O.	4301 West Markham, Little Rock 72205	664-5000
PATH	Young, Douglas E.	1700 West 13th Street, Little Rock 72202	374-3351
U	Young, Jerry M.	406 Pershing, North Little Rock 72114	758-1310
P	Young, William O.	503 Donaghey Building, Little Rock 72201	374-8656
D	Zell, Lawrence M.	937 Donaghey Building, Little Rock 72201	374-5158

RANDOLPH COUNTY

FP	Baltz, Albert L.	110 West Broadway, Pocahontas 72455	892-3111
FP	Baltz, M. A.	110 West Broadway, Pocahontas 72455	892-3111
FP	Barre, Hal S.	213 West Broadway, Pocahontas 72455	892-3371
FP	DeClerk, Thomas B.	204 Thomasville, Pocahontas 72455	892-3344
FP	Scott, William W.	213 West Broadway, Pocahontas 72455	892-3371
FP	Smith, Norman K.	197 Van Ribber, Pocahontas 72455	892-3389
GS	Wyllie, James J.	308 West Broadway, Pocahontas 72455	892-5100

SALINE COUNTY

FP	Ashby, John W.	302 West South, Benton 72015	778-4511
GS	Baber, Quin M.	105 McNeil, Benton 72015	778-7435
FP	Bethel, James C.	221 East Sevier, Benton 72015	778-3382
OR	Duncan, J. Shelby	105 McNeil, Benton 72015	778-1388
FP	Hogue, F. Paul	302 West South, Benton 72015	778-4511
FP	Hood, Robert	Arkansas State Hospital, Benton 72015	778-1111
FP	Izard, Ralph S.	Post Office Box AA, Bryant 72022	847-0289
FP	Jones, C. W., Jr.	223 South Market, Benton 72015	778-2722
FP	Jones, Curtis W., Sr.	223 South Market, Benton 72015	778-2722
FP	Jones, Robert E.	225 South Market, Benton 72015	778-3608
FP	Kirk, Marvin N., Jr.	203 West Carpenter, Benton 72015	778-8264
FP	Martindale, J. L.	323 Short Street, Benton 72015	778-1124
ADM	Mizell, Walter S.	Arkansas State Hospital, Benton 72015	778-1111
P	McDaniel, Thomas W.	Arkansas State Hospital, Benton 72015	778-1111
P	McNichol, Ronald W.	Arkansas State Hospital, Benton 72015	778-1111
FP	Porter, Jim C.	212 West Sevier, Benton 72015	778-0451
P	Thompson, John P.	Arkansas State Hospital, Benton 72015	778-1111
FP	Thorn, H. B., Jr.	302 West South, Benton 72015	778-4511
GS	Viner, Donald L.	105 McNeil, Benton 72015	778-7435
FP	*Walton, Charles R.	Montgomery, Alabama	
FP	Wright, John D.	321 Short Street, Benton 72015	778-1119

SCOTT COUNTY

P+	Jenkins, James A.	4301 West Markham, Little Rock 72205	664-5000
FP	Wright, Harold B.	P. O. Box 249, Waldron 72958	637-3111

SEARCY COUNTY

FP	Hall, John A.	302 East Main, Clinton 72031	745-2111
FP	Williams, John H.	P. O. Box 280, Marshall 72650	448-2554

Type of Practice	Member's Name	Address	Telephone Number
SEBASTIAN COUNTY			
RD.	Adams, William F.	1100 Murta Road, Van Buren 72956 (Res.)	474-8668
IM.	Allen, George W.	320 North Greenwood, Fort Smith 72901	782-3001
GS.	Anderson, Paul M.	314 North Greenwood, Fort Smith 72901	782-4066
FP.	Bailey, Charles W.	Post Office Box 428, Greenwood 72936	996-4111
D.	Bradford, A. C.	100 South 14th, Fort Smith 72901	783-1183
R.	Broadwater, John R.	1500 Dodson, Fort Smith 72901	782-4092
	*Brooksher, William R.	Fort Smith	
OR.	Brown, Byron L.	2704 Barry, Fort Smith 72901	783-3604
NS.	Brown, James A.	2702 Barry, Fort Smith 72901	785-2636
OR.	Buie, James H.	1500 Dodson, Fort Smith 72901	782-4092
PD.	Cabell, Ben B.	312 South 16th, Fort Smith 72901	782-7921
IM.	Carter, Sarah A.	VA Hospital, North Little Rock 72114	372-8361
R.	Cassady, Calvin R.	1500 Dodson, Fort Smith 72901	782-4092
P.	Chambers, Donald S.	924 Adelaide, Fort Smith 72901	785-1428
ANES.	Chamblin, Don W.	1500 Dodson, Fort Smith 72901	782-4092
TS.	Clemmons, Edward E.	720 Lexington, Fort Smith 72901	785-2871
ANES.	Coffman, Edwin L.	1500 Dodson, Fort Smith 72901	782-4092
CR.	Crigler, Ralph E.	1500 Dodson, Fort Smith 72901	782-4092
R.	Crow, Neil E.	1500 Dodson, Fort Smith 72901	782-4092
TS.	Darnall, Harley C.	211-D North Greenwood, Fort Smith 72901	782-8667
PATH.	Davenport, O. Leo	922 Lexington, Fort Smith 72901	785-1447
O8G.	Ellis, Homer G.	P. O. Box 3507, Fort Smith 72901	785-2411
OPH.	Faier, Samuel Z.	1500 Dodson, Fort Smith 72901	782-4092
U.	Feder, Frederick P.	1400 South "D", Fort Smith 72901	785-2604
FP.	Feild, T. A., III	3600 North "O" Street, Fort Smith 72901	783-5158
PD.	Floyd, Charles H.	617 South 16th, Fort Smith 72901	783-3165
RD.	Foltz, Thomas P.	2710 Lela, Fort Smith 72901 (Res.)	783-8218
OTO.	Gedosh, Edgar A.	600 South 16th, Fort Smith 72901	782-6022
R.	Gill, James A.	1500 Dodson, Fort Smith 72901	782-4092
PATH.	Girkin, R. Gene	922 Lexington, Fort Smith 72901	785-1447
RD.	Goldstein, D. W.	100 South 14th, Fort Smith 72901	783-1183
ANES.	Goodman, Raymond C.	1500 Dodson, Fort Smith 72901	782-4092
FP.	Hall, Charles W.	101 West Sycamore, Greenwood 72936	996-2947
OR.	Hathcock, Alfred B.	1500 Dodson, Fort Smith 72901	782-4092
GS.	Hawkins, S. Wright	100 South 14th, Fort Smith 72901	783-1183
OPH.	Henry, L. Murphey	602 Garrison, Fort Smith 72901	782-7261
U.	Hewett, Archie L.	1400 South "D", Fort Smith 72901	785-2604
	Hoge, Arthur F.	Oklahoma City, Oklahoma	
GS.	Hoge, Marlin	314 North Greenwood, Fort Smith 72901	782-4066
GS.	Holmes, W. C., Jr.	100 South 14th, Fort Smith 72901	783-1183
R.	Holton, Jerry C.	P. O. Box 3096, Fort Smith 72901	783-4803
IM.	Hornberger, E. Z., Jr.	P. O. Box 3006, Fort Smith 72901	783-3159
OPH.	Hughes, Robert P., Jr.	1214 North "B", Fort Smith 72901	782-8892
OR.	Irwin, Peter J.	1500 Dodson, Fort Smith 72901	782-4092
O8G.	Kelsey, J. F.	P. O. Box 3507, Fort Smith 72901	785-2411
RD.	Kennedy, Virgil N.	5417 Grand Avenue, Fort Smith 72901 (Res.)	452-3351
OR.	Kirkpatrick, Hoyt, Jr.	1500 Dodson, Fort Smith 72901	782-4092
CD.	Klopfenstein Keith	1500 Dodson, Fort Smith 72901	782-4092
OR.	Knight, W. E.	1500 Dodson, Fort Smith 72901	782-4092
PATH.	Koenig, Albert S.	922 Lexington, Fort Smith 72901	785-1447
FP.	Kramer, Ralph G.	603 Lexington, Fort Smith 72901	783-8917
IM.	Krock, Curtis J.	1500 Dodson, Fort Smith 72901	782-4092
RD.	Krock, Fred H.	1500 Dodson, Fort Smith 72901	782-4092
FP.	Kutait, Kemal	1120 Lexington, Fort Smith 72901	785-2655
IM.	Lambiotte, Louis O.	1500 Dodson, Fort Smith 72901	782-4092
PATH.	Landrum, Annette V.	500 Lexington, Fort Smith 72901	782-4983
GS.	Landrum, Samuel E.	314 North Greenwood, Fort Smith 72901	782-4066
OTO.	Lane, Charles S., Jr.	600 South 16th, Fort Smith 72901	782-6022
IM.	LeBlanc, Joseph V.	100 South 14th, Fort Smith 72901	783-1183
IM.	Lewing, Hugh S.	404 South 16th, Fort Smith 72901	783-3159
FP.	Lilly, Kenneth	1120 Lexington, Fort Smith 72901	785-2655
NS.	Lockhart, William G.	1500 Dodson, Fort Smith 72901	782-4092
GS.	Lockwood, Franklin M.	1500 Dodson, Fort Smith 72901	782-4092
IM.	Martin, Art B.	1500 Dodson, Fort Smith 72901	782-4092
O8G.	Mason, J. N.	1500 Dodson, Fort Smith 72901	782-4092
FP.	Meador, Don M.	3600 North "O" Street, Fort Smith 72901	783-5158
R.	Mendelsohn, E. A.	1500 Dodson, Fort Smith 72901	782-4092
GS.	Mings, Harold H.	1500 Dodson, Fort Smith 72901	782-4092
OPH.	Moulton, Everett C., Jr.	1214 North "B", Fort Smith 72901	782-8892
R.	Mullican, Mary Ann	P. O. Box 341, Muldrow, Oklahoma 74948 (Res.)	NF
FP.	Murchison, R. A.	P. O. Box 7, Lavaca 72941	674-2801
D.	McCraney H. C.	217 Lexington, Fort Smith 72901	783-0297
FP.	McDonald, H. P.	2044 North 29th, Fort Smith 72901	782-4833
OPH.	McEwen, Stanley R.	1214 North "B", Fort Smith 72901	782-8892
IM.	McMinimy D. J.	1500 Dodson, Fort Smith 72901	782-4092
ANES.	Northum, Charles S.	1500 Dodson, Fort Smith 72901	782-4092
GS.	Olson, John D.	1500 Dodson, Fort Smith 72901	782-4092
PD.	Parker, Joel E., Jr.	617 South 16th, Fort Smith 72901	783-3165
FP.	Parta, H. John	3120 Jenny Lind, Fort Smith 72901	782-4986
GS.	Patton, Gerald K.	100 North 16th, Fort Smith 72901	782-5063
IM.	Pence, Eldon D., Jr.	320 North Greenwood, Fort Smith 72901	782-3001
O8G.	Phillips, William P.	P. O. Box 3507, Fort Smith 72901	785-2411
FP.	Pillstrom, Lawrence G.	1120 Lexington, Fort Smith 72901	785-2655
IM.	Poe, McDonald, Jr.	320 North Greenwood, Fort Smith 72901	782-3001
PD.	Post, James M., Jr.	617 South 16th, Fort Smith 72901	783-3165
IM.	Prewitt, Taylor A.	100 South 14th, Fort Smith 72901	783-1183
IM.	Price, Larry C.	P. O. Box 3006, Fort Smith 72901	783-3159
OTO.	Raymond, Thomas H.	600 South 16th, Fort Smith 72901	782-6022
R.	Rogers, Paul L.	P. O. Box 3096, Fort Smith 72901	783-4803
ANES.	Safraneck, Edward J.	216-A North Greenwood, Fort Smith 72901	783-1497
GS.	Saviers, Boyd M.	1500 Dodson, Fort Smith 72901	782-4092
A.	Schirmer, Roy E.	1420 South "I", Fort Smith 72901	782-2983
RD.	Scott, Morgan Henry	512 North 39th, Fort Smith 72901 (Res.)	NF
O8G.	Sherman, Robert L.	P. O. Box 3507, Fort Smith 72901	785-2411
FP.	Shermer, J. P.	623 South 21st, Fort Smith 72901	783-1520
FP.	Shippey, William L.	612 South 24th, Fort Smith 72901	783-7227
NP.	Sims, Henry M.	608 North Greenwood, Fort Smith 72901	783-4303
O8G.	Smith, Douglas B.	P. O. Box 3507, Fort Smith 72901	785-2411
R.	Snider, James R.	1500 Dodson, Fort Smith 72901	782-4092
OR.	Stanton, William B.	300 North Greenwood, Fort Smith 72901	783-0225
IM.	Stewart, Jerry R.	100 South 14th, Fort Smith 72901	783-1183
FP.	Stewart, John B.	603 Lexington, Fort Smith 72901	783-8917

Type of Practice	Member's Name	Address	Telephone Number
FP	Swena, Richard R.	1322 North "B", Fort Smith 72901	785-2426
FP	Thompson, James B.	605 Lexington, Fort Smith 72901	782-6081
IM	Thompson, J. Kenneth	100 South 14th, Fort Smith 72901	783-1183
FP	Thompson, Robert J.	605 Lexington, Fort Smith 72901	782-6081
IM	Turner, William F.	1500 Dodson, Fort Smith 72901	782-4092
U	Wahman, Gerald E.	1500 Dodson, Fort Smith 72901	782-4092
PD	Watts, John C.	500 South 16th, Fort Smith 72901	783-0211
ANES	Westermann, Norman F.	1500 Dodson, Fort Smith 72901	782-4092
OBG	Whitaker, Thomas J., Jr.	1823 Dodson, Fort Smith 72901	782-4929
IM	White, J. Earle	320 North Greenwood, Fort Smith 72901	782-3001
PH	Whittaker, Louie A.	708 Lexington, Fort Smith 72901	785-2801
OR	Wideman, John W.	300 North Greenwood, Fort Smith 72901	783-0225
TS	Williams, Carl L.	522 South 16th, Fort Smith 72901	785-1413
U	Wilson, Carl L.	1500 Dodson, Fort Smith 72901	782-4092
U	Willson, Morton C.	1500 Dodson, Fort Smith 72901	782-4092
GS	Woods, Leon P.	1500 Dodson, Fort Smith 72901	782-4092
FP	Woods, William M.	P. O. Box 246, Huntington 72940	928-5060

SEVIER COUNTY

GS	Balch, James I.	Highway 70 West, DeQueen 71832	584-2022
FP	Citty, Jim	P. O. Box 391, DeQueen 71832	584-2022
FP	Daniel, J. Frank	Highway 70 West, DeQueen 71832	584-2022
FP	Dickinson, Richard B.	Fourth and Heynecker, DeQueen 71832	584-2344
FP	Dickinson, R. C.	Fourth and Heynecker, DeQueen 71832	584-2344
FP	Dickinson, Rodger C.	Fourth and Heynecker, DeQueen 71832	584-2344
FP	Jones, Charles N.	Highway 70 West, DeQueen 71832	584-2022
FP	Joseph, Eugene A.	Highway 70 West, DeQueen 71832	584-2022
FP	Pullen, Wayne G.	Highway 70 West, DeQueen 71832	584-2022
FP	Shukers, Carroll F., II	1124 North Washington, Murfreesboro 71958	285-3341

ST. FRANCIS COUNTY

FP	Bradley, Adron M.	P. O. Box 70, Forrest City 72335	633-1243
FP	Chaffin, E. J.	P. O. Box 667, Hughes 72348	339-2914
FP	Cogburn, H. N.	328 Kittel Road, Forrest City 72335	633-1425
FP	Collins, E. Morgan, Jr.	P. O. Box 989, Forrest City 72335	633-1952
FP	Collum, Grady R.	Box 577, Hughes 72348	339-2111
FP	Crawley, Charles E.	328 Kittel Road, Forrest City 72335	633-1425
PD	Davis, Patricia C.	P. O. Box 4000, Forrest City 72335	633-1425
FP	Fong, Fun H.	P. O. Box 735, Hughes 72348	339-2373
FP	Hollis, Herbert H.	317 North Washington, Forrest City 72335	633-4209
FP	Laney, J. Neal	325 North Washington, Forrest City 72335	633-4711
FP	Lockhart, David L.	P. O. Box 4000, Forrest City 72335	633-1425
FP	McPhail, George T.	P. O. Box 989, Forrest City 72335	633-1952
FP	Roy, J. Max	426 Mississippi Street, Forrest City 72335 (Res.)	633-1552
FP	Sexton, Giles A.	328 Kittel Road, Forrest City 72335	633-1425

UNION COUNTY

R	Burton, George C.	427 West Oak, El Dorado 71730	863-9173
OR	Callaway, James C.	619 West Grove, El Dorado 71730	863-5146
GS	Cathey, Arley D.	112 West Peach, El Dorado 71730	863-4128
U	Clark, James F.	524 West Faulkner, El Dorado 71730	863-4267
FP	Clowney, Albert R.	312 Thompson, El Dorado 71730	863-4101
P	Cullins, John G.	1412 South Taylor Street, Little Rock 72204 (Res.)	663-8201
OTO	Cyphers, Charles D.	519 West Faulkner, El Dorado 71730	862-3471
R	DeLany, Clarence L.	460 West Oak, El Dorado 71730	863-3161
P	Douglas, William W.	4313 West Markham, Little Rock 72205	666-0181
FP	Dunn, Tom L.	P. O. Box 538, Hampton 71744	798-2525
PATH	Duzan, Kenneth R.	443 West Oak, El Dorado 71730	862-1351
PATH	Elliott, Wayne G.	443 West Oak, El Dorado 71730	862-1351
IM	Ellis, Jacob P.	714 West Faulkner, El Dorado 71730	862-5184
OBG	Fitch, Leston E.	445 West Oak, El Dorado 71730	863-7217
FP	Harper, John W.	425 West Oak, El Dorado 71730	863-5135
PD	Harrison, Margaret	514 West Faulkner, El Dorado 71730	862-4994
OR	Hartmann, Ernest R.	619 West Grove, El Dorado 71730	863-5146
GS	Henley, Paul G.	700 West Faulkner, El Dorado 71730	863-9542
FP	Hill, Grady E., Jr.	427 West Oak, El Dorado 71730	863-7158
RD	Jameson, Sam G.	532 West Faulkner, El Dorado 71730	862-6852
R	King, B. D.	460 West Oak, El Dorado 71730	863-3161
OPH	Landers, Gardner H.	318 Thompson, El Dorado 71730	862-4216
ANES	Lewis, Ronald M.	427 West Oak, El Dorado 71730	863-7294
	*Mayfield, Hugh J.	El Dorado	
FP	Moore, Barry L., Jr.	615 West Grove, El Dorado 71730	863-4185
RD	Murphy, Garland D., Sr.	Calion Highway, El Dorado 71730 (Res.)	NF
PD	McKinney, J. 5.	514 West Faulkner, El Dorado 71730	862-4994
GS	Pinson, J. H., Jr.	312 Thompson, El Dorado 71730	863-4101
IM	Pirnique, Allan 5.	714 West Faulkner, El Dorado 71730	862-5184
OBG	Rainwater, W. Sloan	306 Thompson, El Dorado 71730	863-6157
FP	Riley, Warren 5.	526 West Faulkner, El Dorado 71730	863-4508
PD	Rogers, Henry B.	514 West Faulkner, El Dorado 71730	862-4994
D	Sample, Dorothy C.	427 West Oak, El Dorado 71730	862-6485
GS	Scurlock, William R.	412 North Washington, El Dorado 71730	862-3411
FP	Seale, James E., Jr.	528 West Faulkner, El Dorado 71730	863-7154
FP	Sheppard, Jack M.	528 West Faulkner, El Dorado 71730	863-7154
ANES	Stevens, W. M.	2200 West Elm, El Dorado 71730 (Res.)	862-3828
OBG	Thibault, Frank G., Sr.	416 North Newton, El Dorado 71730	862-5403
GS	Tommey, C. E.	412 North Washington, El Dorado 71730	862-3411
OBG	Turnbow, Robert L.	306 Thompson, El Dorado 71730	863-6157
FP	Warren, George W.	Box W, Smackover 71762	725-3471
GS	Wharton, Joseph B., Jr.	516 West Faulkner, El Dorado 71730	862-4221
IM	Wilson, Larkin M.	714 West Faulkner, El Dorado 71730	862-5184
GS	Yocum, David M., Jr.	412 North Washington, El Dorado 71730	862-3411

WASHINGTON COUNTY

D	Albright, Spencer D., III	1925 Green Acres Road, Fayetteville 72701	443-3413
FP	Applegate, C. Stanley, Jr. (President)	220 Meadow Avenue, Springdale 72764	751-4637
FP	Baggett, Jeff J.	128 Buchanan, Prairie Grove 72753	846-2155
FP	Baker, Charles R.	22 East Spring, Fayetteville 72701	443-3417
FP	Baker, Donald B.	241 West Spring, Fayetteville 72701	442-6256
FP	Box, Ivan H.	P. O. Box E, Huntsville 72740	738-2115
PATH	Boyce, John M.	609 West Maple, Springdale 72764	751-5711
FP	Boyer, H. L.	107 North Star, Lincoln 72744 (Res.)	824-3203
U	Brandon, H. B.	Evelyn Hills Shopping Center, Fayetteville 72701	442-5262
RD	Brizzolara, Charles M.	5512 South Grandview Road, Little Rock 72207 (Res.)	666-5977
U	Brooks, W. Ely	Evelyn Hills Shopping Center, Fayetteville 72701	442-5262

Type of Practice	Member's Name	Address	Telephone Number
P+	Brown, Spencer H.	4313 West Markham, Little Rock 72205.	666-0181
FP	Buckley, Carie D., Jr.	241 West Spring, Fayetteville 72701.	442-6256
PD	Burnside, Wade W.	207 East Dickson, Fayetteville 72701.	443-3471
RD	Butt, William J.	Route 4, Fayetteville 72701 (Res.)	442-7563
FP	Capps, James A., Jr.	P. O. Box 48, Springdale 72764.	751-4637
ANES	Chester, Robert L.	660 Lollar Lane, Fayetteville 72701.	521-3050
O8G	Clark, LeMon	226 North Locust, Fayetteville 72701.	521-1717
OR	Coker, Tom P.	1673 North College, Fayetteville 72701.	521-2752
O8G	Cole, George R., Jr.	740 Lollar Lane, Fayetteville 72701.	521-4433
P	Cowan, Judith R.	Infirmary, U of A, Fayetteville 72701.	575-4451
OTO	Crocker, Thermon R.	102 West Dickson, Fayetteville 72701.	521-1238
	DeLaney, Joseph P.	Gainesville, Florida	
PS	DePalma, Anthony T.	220 South School, Fayetteville 72701.	442-2002
ANES	Dodson, C. Dwight	946 California, Fayetteville 72701.	443-3387
GS	Dorman, John E.	1203 West Sunset, Springdale 72764.	756-6161
FP	Dorman, John W.	1203 West Sunset, Springdale 72764.	756-6161
P	Edmisten, Jack	P. O. Box 1108, Fayetteville 72701.	521-1221
R	Edmondson, Charles T.	Route 3, Box 253, Springdale 72764.	751-0492
FP	Edmondson, Rogers P.	Quandt and Young Street, Springdale 72764.	751-9236
FP	Etherington, Robert A.	41 Kingshighway, Eureka Springs 72632.	253-9746
NP	Finch, Stephen B.	617 West Dickson, Fayetteville 72701.	443-3491
OTO	Fincher, G. Glen	102 West Dickson, Fayetteville 72701.	443-2351
A	Fincher, Martha H.	102 West Dickson, Fayetteville 72701.	443-2351
	*Fowler, W. A.	Fayetteville	
GS	Gardner, Buford M.	Box 730, Fayetteville 72701.	443-5291
GS	Gray, Thomas W.	VA Hospital, Fayetteville 72701.	443-2301
FP	Greenhaw, James J.	P. O. Box 186, Springdale 72764.	751-5091
IM	Hall, Joe B.	675 Lollar Lane, Fayetteville 72701.	442-5386
FP	Hathcock, Preston L.	240 North Block, Fayetteville 72701.	442-7333
D	Hayden, Carson R.	Evelyn Hills Shopping Center, Fayetteville 72701.	442-9211
PD	Haynes, James E.	207 East Dickson, Fayetteville 72701.	443-3471
OPH	Henry, Louise M.	204 South East Avenue, Fayetteville 72701.	442-5227
OPH	Henry, Morris M.	P. O. Box 1225, Fayetteville 72701.	442-5227
IM	Higginbotham, Hugh B.	675 Lollar Lane, Fayetteville 72701.	442-5386
ANES	Horner, Glennon A.	660 Lollar Lane, Fayetteville 72701.	521-3050
P	Jarvis, Fred D., Jr.	1031 North College, Fayetteville 72701.	442-5482
FP	Jones, Evelyn R.	2905 Elizabeth Avenue, Fayetteville 72701 (Res.)	521-1399
FP	Jones, J. Laurence	Infirmary, U of A, Fayetteville 72701.	575-4451
OR	Kaylor, Coy C.	1673 North College, Fayetteville 72701.	521-2752
OR	Kendrick, Carl M.	1673 North College, Fayetteville 72701.	521-2752
PD	Lawson, Wilbur G.	207 East Dickson, Fayetteville 72701.	442-6226
RD	Leming, Howell E.	406 East Rebecca, Fayetteville 72701 (Res.)	442-7264
GYN	Lesh, Ruth E.	221 North College, Fayetteville 72701.	443-2343
RD	Lesh, Vincent O.	Pointe Clear Heights, Route 3, Rogers 72756 (Res.)	636-6811
O8G	Lushbaugh, Harmon	740 Lollar Lane, Fayetteville 72701.	521-4433
O8G	Mashburn, James D.	207 East Dickson, Fayetteville 72701.	442-5377
	*Mock, William H.	Prairie Grove	
IM	Moore, Arthur F.	675 Lollar Lane, Fayetteville 72701.	442-5386
FP	Morgan, Tad M.	Quandt and Young Streets, Springdale 72764.	751-9236
GS	Murry, J. Warren	1749 North College, Fayetteville 72701.	521-3300
OPH	McAllister, Max F.	18 E. Dickson, Fayetteville 72701.	442-4011
FP	McCollum, Robert H.	102 West Dickson, Fayetteville 72701.	442-8772
GS	McCutcheon, Frank	1617 North College, Fayetteville 72701.	443-4385
FP	McEvoy, Francis E.	Quandt and Young Streets, Springdale 72764.	751-9236
PATH	Nettleship, Anderson	P. O. Box 817, Fayetteville 72701.	443-3050
PATH	Nettleship, Mae B.	P. O. Box 817, Fayetteville 72701.	443-3050
O8G	Page, M. Bryan	207 East Dickson, Fayetteville 72701.	442-5377
IM	Painter, Monroe B.	675 Lollar Lane, Fayetteville 72701.	442-5386
OPH	Parker, Joe C.	Young Street, Springdale 72764.	751-2323
FP	Parker, Lee B., Jr.	241 West Spring, Fayetteville 72701.	442-6256
FP	Patrick, James K.	241 West Spring, Fayetteville 72701.	442-6256
FP	Power, John R.	Meadow and Blair, Springdale 72764.	751-4637
O8G	Rabon, Nancy A.	Evelyn Hills Shopping Center, Fayetteville 72701.	442-8261
GS	Rolufs, Lloyd S.	41 Kingshighway, Eureka Springs 72632.	253-9746
RD	Siegel, Lawrence H.	233 Oakwood, Fayetteville 72701 (Res.)	442-2083
FP	Sisco, Friedman	P. O. Box 65, Springdale 72764.	756-4579
FP	Smith, Austin C.	P. O. Box E, Huntsville 72740.	738-2115
R	Thomas, Leo D.	Route 1, Box 321, Fayetteville 72701.	442-6481
FP	Tucker, Theodore K.	128 Buchanan, Prairie Grove 72753.	846-2155
RD	Van Pelt, Ross	P. O. Box 126, Beaver 72613 (Res.)	253-8546
FP	Vinzant, John W.	22 East Spring, Fayetteville 72701.	443-3417
R	Ward, Herbert Wendell	Springdale Memorial Hospital, Springdale 72764.	751-5711
FP	Wheat, Ed	130 North Spring, Springdale 72764.	751-5704
A	Whiteside, Edwin	Route 1, Highway 45 East, Fayetteville 72701.	443-5241
FP	Whiting, Tom D.	803 Quandt, Springdale 72764.	751-9236
GS	Wood, Jack A.	1749 North College, Fayetteville 72701.	521-3300
RD	Wozencraft, William L.	310 North Fletcher, Fayetteville 72701.	

WHITE COUNTY

FP	Adair, Thomas L.	Collision Building, Bald Knob 72010.	724-3220
R	Bell, John E.	1400 West Pleasure, Searcy 72143.	268-8500
FP	Bridges, Olen W.	607 Woodruff, Searcy 72143.	268-5811
IM	Brown, A. R.	P. O. Box 1083, Searcy 72143.	268-6131
FP	Dodd, William C.	Bald Knob 72010.	724-3240
	*Dunklin, A. J.	Searcy	
FP	Edwards, Hugh R.	607 Woodruff, Searcy 72143.	268-5811
R	Elliott, Robert E.	1400 West Pleasure, Searcy 72143.	268-8500
GS	Farrar, Henry C.	Nigeria, West Africa	
FP	Formby, Thomas A.	910 East Race, Searcy 72143.	268-3566
O8G	Gardner, Jack R.	910 East Race, Searcy 72143.	268-3566
RD	Hawkins, M. C., Jr.	P. O. Box 156, Searcy 72143 (Res.)	268-2585
FP	Jackson, C. W.	P. O. Box C, Judsonia 72081.	268-2183
IM	Johnson, David M.	1407 East Race, Searcy 72143.	268-6131
FP	Kinley, J. Garrett	401 Center, Beebe 72012.	882-3388
RD	Kinley, James D.	Beebe 72012 (Res.)	882-5400
FP	Lowery, Benjamin R.	910 East Race, Searcy 72143.	268-3566
FP	Maguire, Frank C., Jr.	200 South Fourth, Augusta 72006.	347-2131
GS+	Morris, William D.	4301 West Markham, Little Rock 72205.	664-5000
FP	Norris, Elvin L.	401 Center, Beebe 72012.	882-3388
FP	Paine, Charles H., Jr.	P. O. Box 958, Searcy 72143.	268-5811
IM	Palmer, H. C., Jr.	1407 East Race, Searcy 72143.	268-6131
FP	Ransom, Clarence E., Jr.	607 Woodruff, Searcy 72143.	268-5811
GS	Rodgers, Porter R., Jr.	403 East Lincoln, Searcy 72143.	268-2441
FP	Rodgers, Porter R., Sr.	607 Woodruff, Searcy 72143.	268-5811

Type of Practice	Member's Name	Address	Telephone Number
RD.	Sanford, Sloan M.	P. O. Box 12, Searcy 72143.	268-8930
FP.	Short, Harold	501 North Main, Beebe 72012.	882-5561
FP.	Sloan, Dewey W.	315 North Hickory, Beebe 72012 (Res.).	882-5489
FP.	Smith, Bernard C.	Bradford 72020	344-2788
IM.	White, William D.	1407 East Race, Searcy 72143.	268-6131

WOODRUFF COUNTY

FP.	Hendrixson, Basil E.	306 East Third, McCrory 72101.	731-2511
FP.	Morris, John W.	118 West Main, McCrory 72101.	731-2631
FP.	Rowe, James E.	306 East Third, McCrory 72101.	731-2511

CODE FOR TYPE OF PRACTICE

A.	Allergy	O&G.	Obstetrics & Gynecology
ADM.	Administrative Medicine	OM.	Occupational Medicine
ANES.	Anesthesiology	OPH.	Ophthalmology
CD.	Cardiovascular Disease	OR.	Orthopedics
CP.	Child Psychiatry	OTO.	Otolaryngology
CR.	Colon & Rectal Surgery	P.	Psychiatry
D.	Dermatology	PATH.	Pathology
EENT.	Eye, Ear, Nose & Throat	PD.	Pediatrics
EM.	Emergency Care	PDA.	Pediatric Allergy
FP.	Family Practice	PDC.	Pediatric Cardiology
GE.	Gastroenterology	PH.	Public Health
GS.	General Surgery	PM.	Preventive Medicine
GYN.	Gynecology	PMR.	Physical Medicine-Rehabilitation
HEMA.	Hematology	PS.	Plastic Surgery
I.	Intern	PUD.	Pulmonary Disease
IM.	Internal Medicine	R.	Radiology
N.	Neurology	RD.	Retired
NEPH.	Nephrology	TS.	Thoracic Surgery
NP.	Neuropsychiatry	U.	Urology
NS.	Neurosurgery	+	Resident

*—Deceased
 NF—No Telephone

Agenesis of the Lung

W. C. Williams, M.D.* and O. E. Riggs, M.D.**

Agenesis of the lung has been considered a rare anomaly. However, by 1967 there had been at least 200 cases reported in the literature¹. We propose that the anomaly is not as rare as once thought and that uncommon is probably a better descriptive term.

Two patients with this anomaly were recently seen at this hospital. Details of these cases are presented below.

Case #1

A 7 week old Negro female developed coughing, wheezing, and dyspnea 4 days prior to admission to this hospital. She was seen by her local physician and was treated with an injection. She was seen three days later with no improvement and was referred to this hospital. Upon admission she was noted to be mildly cyanotic.

This patient was the second child of a 28 year old female. The baby was delivered by a mid-

wife who reported some difficulty getting her to cry. She subsequently did well and had no difficulty until the present illness.

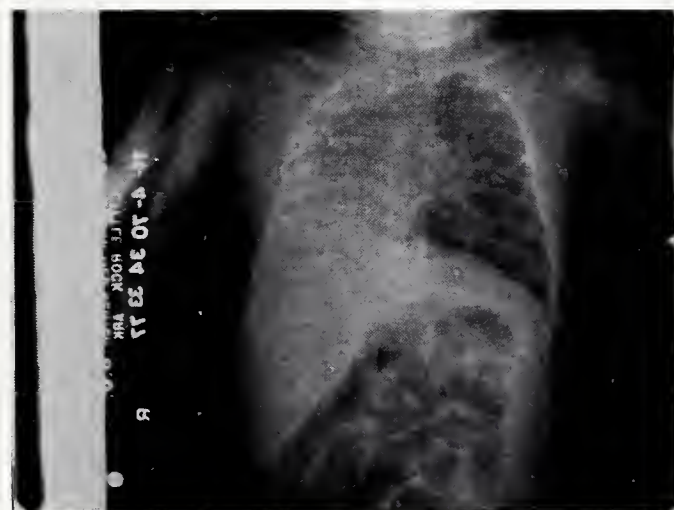
Physical examination showed a normally developed seven week old female infant in acute respiratory distress. Examination of the chest revealed coarse wheezes throughout. Decreased breath sounds and dullness were noted over the right hemithorax. Heart sounds were heard best over the right hemithorax.

A chest radiograph showed opacity of the right hemithorax with shift of the heart and mediastinum toward the right. There was also herniation of the left lung across the anterior mediastinum. Leukocyte count was 13,300.

It was felt that the patient's right lung was atelectatic. A bronchoscopic examination was performed. The examination was difficult and visualization was poor. The mucosa was edematous. The right main stem bronchus was small and sharply angulated. Antibiotics were begun but the patient failed to improve. Respiratory difficulty continued and approximately 24 hours after admission she expired.

At necropsy the left lung was found to be over expanded with herniation across the anterior mediastinum. The thymus was large weighing 15 grams and was found in the right hemithorax. The heart was deviated into the right hemithorax but was otherwise normal. The right lung consisted of a small wisp of tissue on the right side of the trachea at the level of the left main stem bronchus. There was a small dimple in the trachea at this level which represented the undeveloped right main stem bronchus. A small aplastic pulmonary artery entered the

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(Figure 1)

aplastic right lung. The trachea and left main stem bronchus contained mucoid purulent secretions consistent with a severe tracheobronchitis. The remainder of the autopsy was normal.

Case #2

This white female child was born after full term gestation without complications. The child was vigorous at birth and was apparently normal. However, at two days of age it was noticed that cyanosis developed during feedings.

Physical examination revealed a normally developed 8 pound female infant. She developed cyanosis with crying and with feedings. The precordial impulse was maximal at the lower left sternal border. There was a grade III over six systolic murmur along the left sternal border. There was dullness to percussion over the left lower hemithorax. A chest radiograph revealed opacity of the left lower hemithorax with deviation of the mediastinal contents into the left chest. There was herniation of the right lung across the anterior mediastinum. The right pulmonary vascularity appeared normal.

Electrocardiogram showed right axis deviation and evidence of leftward shift of the heart.

Cardiac catheterization and angiocardigram was done. A right ventricular injection was

made. Both the great vessels opacified early in the injection. The pulmonary artery arose in its normal position from the right ventricle. The infundibulum was narrowed and there was pulmonary valvular stenosis. The left pulmonary artery was absent. The right pulmonary artery was normally developed. The aorta arose from the left ventricle in a normal manner. There was a ventricular septal defect.

A bronchogram was performed which showed absence of the left main stem bronchus. The final diagnosis was agenesis of the left lung and absence of the left pulmonary artery associated with tetralogy of Fallot.

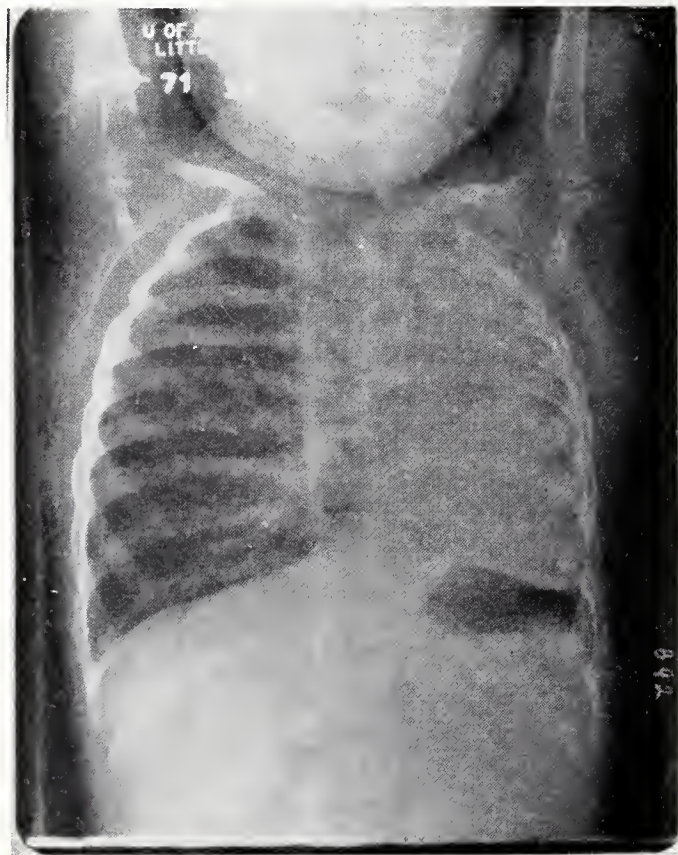
The patient is now three years of age. Her course over the last 3 years has been relatively benign. She does, however, continue to have frequent upper respiratory infections and cyanosis with exercise.

Diagnosis

Schneider in 1912 classified this anomaly under three main types². Type one is true aplasia in which there is no trace of the lung, bronchus or vascular supply on the affected side. In type two the bronchus is represented by a small out-pouching from the trachea and is supported by a ring of cartilage. Type three is extreme hypoplasia, rather than aplasia, in which the bronchus is fully formed but is reduced in size and ends in a fleshy structure without lobes which lie within the mediastinum.

Patients with this anomaly usually have no acutely distressing symptoms, and may live totally asymptomatic and normal lives. Some, however, will have frequent upper respiratory infections. Occasionally a patient will die of pneumonia during the first or second decade. The oldest reported case was that of a 72 year old female who died from causes unrelated to the anomaly³. Other congenital anomalies are often associated and may cause more distress than agenesis of the lung.

The diagnosis cannot be made by physical examination alone, but the presence of the defect may be suspected from asymmetry of the two sides of the thorax, reduction in respiratory movement, and absence of air entering into the involved side. However, in newborn and young children the chest is generally normal in shape and may be misleading⁴.



(Figure 2)

The roentgen findings in cases of agenesis of the lung are as might be expected with total or almost total absence of aerated lung in one hemithorax. Plain film findings do not differentiate this defect from other causes of total atelectasis of one lung⁵. The marked loss of volume is indicated by the approximation of ribs, elevation of the ipsilateral hemidiaphragm, and shift of the mediastinum. The contralateral lung is usually greatly over-inflated and there is herniation across the anterior mediastinum into the involved hemithorax⁶. This herniation of air containing lung to the side of the agenesis may lead to some confusion in diagnosis. Tomography, bronchography, and angiography may all be required to establish the degree of underdevelopment or to differentiate agenesis from other conditions which closely mimic it roentgenographically⁷. Total atelectasis from any cause, severe bronchiectasis with associated collapse, and advanced fibrothorax must be considered in the differential diagnosis.

About 60% of patients with agenesis of the lung also have other congenital anomalies. Manifestations of these other lesions may exceed those of the agenesis itself. The most frequent of the wide variety of associated anomalies are patent

ductus arteriosus, retrology of Fallot, anomalies of the great vessels, bronchogenic cysts, and anomalies of the bones.

Summary

Agenesis of the lung has been considered a rare congenital anomaly. We propose that the defect is not as rare as commonly thought and that it might be better considered uncommon.

Two case histories are presented. The clinical manifestations and diagnostic criteria are discussed.

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Myocardial Blood Flow in Pacing-Induced Angina

C. R. Conti et al (Johns Hopkins Hosp, Baltimore 21205)

Circulation 42:815-826 (Nov) 1970

Current methods of measuring myocardial blood flow using ¹³³Xe have failed to separate normals from patients with ischemic heart disease at rest. Such a separation was attempted by utilizing pacing-induced tachycardia (PIT) to stress the myocardium. ¹³³Xe was injected into the left coronary to measure blood flow in 27 patients at rest and during PIT. Patients with an ischemic response to PIT had a greater increase in myocardial blood flow than patients who did not develop an ischemic response. This unexpected finding is best explained by an increased myocardial blood flow in the non-ischemic areas of myocardium which may result from a vasodilator response to ischemia.

Involution of Liver Mitochondria in Viral Hepatitis

I. Pavel, H. Bonaparte (6 Intrarea Carageale, Bucharest, Romania), and A. Petrovici
Arch Path 91:294-301 (April) 1971

During electron microscopic exploration of patients with viral hepatitis the authors recorded involution of mitochondria through transformation into microbodies, dissolution of mitochondria in the granular or agranular endoplasmic reticulum, incorporation in preexisting lysosomes, fingerprint involution, involution through degenerescence and pigmentary inhibition. The type of involution seems to characterize certain evolutive forms of viral hepatitis with relapses or morbid associations, denutrition, ethylism, and paludism. The type of involution can thus reveal the copathology of a case and enable a prognosis to be forecast.

Agency Adoptions in Arkansas

Kelsy J. Caplinger, M.D.*

Introduction

The adoption of children is a unique human experience as old as the records of civilization.^{1, 2} The high level of adoption practices prevalent in the United States today is based on the highest of human motives, and is associated with one of the greatest of human privileges, i.e., that of participating in the development of the full potential of a fellow human being.

The human relationships involved in the adoption of a child are of profound and lasting importance, and the medical profession is privileged to play a significant role in the process. The doctor's responsibility in the adoption may include the investigation and treatment of infertility, the obstetrical management of the natural parent, the immediate appraisal and subsequent pediatric care of the adoptee, and the psychiatric attention which any or all of the parties to adoption may require in this most delicate and emotionally charged experience.³

Various professional organizations (including the American Academy of Pediatrics, the Legal Department of the American Medical Association, the American Academy of General Practice, the American College of Obstetricians and Gynecologists, the Child Welfare League of America, and the Children's Bureau) have admonished physicians to confine their role in adoption to medical care alone. Thus they would avoid the "intermediary" function of finding an adoptive home. A joint statement by the above groups emphasizes that the licensed agency employing specialized caseworkers is better able to place children.⁴ The need for close cooperation between the physician, the social worker, and the lawyer involved in the adoptive process should be universally recognized.

Family and Children's Services

The only agency in Arkansas licensed to place children for adoption is the Family and Children's Services section of Arkansas Social Services. The authority was given under Section 7, part (2) of Act 280 of 1939. The Arkansas legislation

pertaining to adoption is found in the 1965 Arkansas Statutes, Title 56. Medical, social, and legal services are offered to the unmarried mother, children placed in the Agency's care, and to adoptive parents.

Children for Adoption

Adoption is considered for any child who is deprived of care by his natural parents, who is or can be made legally free for adoption, and who has the capacity to form a relationship with new parents and develop in a family. Children in foster care may have lost parents by death and have no other strong family ties, or the parents may have relinquished the child voluntarily. Many are illegitimate. Some are freed for adoption through termination of parental rights by court action.

Children are assigned to foster homes until adoptive parents can be found. Medical care is provided by physicians in the area. Prior to placement, each child is examined by a pediatrician who helps determine the child's adoptability. The age at placement depends upon when the child can be made legally free.

Adoptive Homes

The agency deals largely with infertile couples who are emotionally suitable for adoptive parenthood. If a prospective couple do not meet the various agency criteria, they can be referred to one of several agencies in the surrounding states. Family and Children's Services may be asked to help with these adoptive studies. Single persons may apply to adopt.

The Adoptive Study

Adoption inquiries to Arkansas Social Services are referred to the Family and Children's Services adoption worker in the couple's area. Some workers cover several counties. Several interviews are conducted to determine the capacity of a couple as adoptive applicants. References are contacted. Additional conferences with the prospective couple are held to discuss fully areas where problems are present or may arise. The study usually consumes 6-12 months.

Placement and Adoption

After the couple is approved, they are considered along with other approved couples until

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they are selected for a particular child. When a child is placed, the court is petitioned to issue the interlocutory decree. There is, by law, a six month probation period before the final decree can be issued. The adoptive parents later receive a new birth certificate for the child with their names listed as parents. Other than legal fees, there is no cost to the adoptive parents for an agency adoption in Arkansas.

Statistics

During the past decade, 2,426 children have been placed by Family and Children's Services for adoption. In 1970, 301 children were placed with 283 couples. Breakdown by age is shown in Table I. A significant new category last year is "Newborn". Placement of the newborn was started by the agency in May, 1970. Twenty-one additional newborns were placed through April, 1971, and the program is continuing. Some newborns cannot be placed during the neonatal period because often additional time is needed due to birth trauma or other medical questions.

Children that are waiting for an adoptive home are kept in foster homes. There were 1,096 children in Arkansas foster homes in January, 1971. Some children still in foster care are not available for adoption because (1) they are not yet legally freed for adoption; (2) they are in temporary care and will be returned to parents or relatives; (3) they have physical or emotional problems so severe that adoptive parents cannot be found for them; or (4) they are above the age for which adoptive parents can be found.

Adoption applications for 1970 are shown in Table II. The number of applicants has been fairly constant over the last several years. There are generally 80-120 homes approved awaiting children.

Independent adoptions (1970) are detailed in Table III. The agency is required by law to investigate any home for independent placement only if directed by the court. Sometimes the court waives a study, and the extent of study varies considerably.

Children With Special Needs

Children in this category include black children, children with medical problems, children with physical handicaps, children over 6 years of age, and families of older children. Some of these children were featured on a weekly tele-

vision program from 6-24-70 to 10-7-70 to attract adoptive parents. A total of 318 telephone inquiries were received, and 20 of the children presented were placed. The agency feels this was a tremendously worthwhile endeavor as these children would otherwise probably still be in foster care. The agency is constantly trying to find suitable adoptive homes for these children.

Summary

The agency adoption can provide specialized services to all those involved in the adoptive process. Family and Children's Services is the only licensed agency in Arkansas. Statistics for 1970 adoptions are presented. The most significant new development is the agency placement of newborns in adoptive homes.

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TABLE I
Age at Placement

Newborns	36
Up to 6 months	154
6 months to 1 year	37
1-3 years	28
3-5 years	21
6 years and over	25
	—
	301

TABLE II
Adoption Applications—1970

Under study at beginning of year	192
New applications received	424
Total during the year	616
Approved during the year	293
Closed during year	92
Under study beginning 1971	231

TABLE III
Independent Adoptions—1970

Parents and other relatives	122
Independent placements	111
Step-parent adoptions	371
	—
	604



DEPARTMENT OF

PEDIATRICS

UNIVERSITY OF ARKANSAS
SCHOOL OF MEDICINE

Hyperuricemia Case Presentation

Discussor: M. Joycelyn Elders, M.D.*

Participant: Horace L. Green, M.D.**

Editorial Director: Jerry G. Jones, M.D.***

DR. GREEN:

HISTORY: This 2½ year old boy was born to a 21 year old gravida 2 para 1 white female following an uncomplicated full term pregnancy. Birth weight was 7 lbs. 9 oz. His parents considered his developmental course normal until four months of age when he was unable to hold his head up, had a weak grasp and seemed "floppy from the waist up". He gradually worsened and at one year of age a tentative diagnosis of cerebral palsy was made. The patient had poor head control, inability to sit, hyper-reflexia, and markedly increased extensor tone. At eighteen months of age the patient began having choreoathetoid movements, was noted to be biting his lips, tongue and buccal mucosa. The patient was referred to UAMC for neurological evaluation and diagnosis.

PHYSICAL EXAMINATION: The patient was a thin, fragile white male with poor head control, choreoathetoid movements, a 3 x 4 cm. ulcerated lesion on the lower lip, and numerous small craters on inferior and superior surface of the tongue. He was obviously retarded and able to say only a few words. He had generalized

muscle weakness but following tactile stimulation assumed an opisthotonic posture with the arms held in extension and hands clenched.

LABORATORY DATA: The patient had a normal blood count and serum electrolytes except for an elevated serum uric acid. Urinalysis showed a sp. gr. 1.008, trace protein, small acetone, uric acid crystals, sulfur crystals, occasional WBC, 1-3 RBC. Serum uric acid 8.2 mg%. In a single voided urine specimen the uric acid concentration was 238 mg% and the creatinine 42.5 mg% with a ratio of 5:1. In a 24 hour urine collection, (volume was 184 cc) the uric acid concentration was 214 mg% and the total 24 hour excretion 393 mg (50 mg/kg/24 hrs.).

HOSPITAL COURSE: Allopurinol (20 mg q.i.d.) was started because of the hyperuricemia. A skin biopsy and blood sample were obtained and sent for enzymatic analysis. It was elected to defer having his lower incisors removed because there seemed to be less self-mutilation than when first hospitalized. He was discharged on the 10th hospital day and Allopurinol (20 mg q.i.d.) continued as an out-patient.

Discussion

DR. ELDERS: Today we are discussing a two year old male child with cerebral palsy, developmental retardation, choreoathetosis, self mutila-

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tion, and hyperuricemia. This clinical picture was first described in 1961 by Lesch and Nyhan and called Juvenile Gout, Mental Retardation, Choreoathetosis and Hyperuricemia in males¹. The accepted name for this clinical syndrome is the Lesch-Nyhan Syndrome (L-N-Syndrome). In 1967 Seegmiller, an internist and biochemist, who has been studying gout most of his medical life, found these children to have a defect in purine metabolism. In the Lesch-Nyhan Syndrome there is a deficiency of the enzyme, hypoxanthine-guanine phosphoribosyl-transferase (HG-PRase)². This enzyme is necessary for the reutilization of purines. When purines are not reutilized, they are degraded and excreted in the urine as uric acid.

Children with this disorder usually appear normal at birth. At 3-4 months of age they become very hypotonic and are unable to support their head. Thus, this disease must be considered when the patient presents with the "floppy infant" syndrome. Frequently spasticity is noted in the lower extremities and finally the choreoathetoid movements develop which are characteristic of this syndrome. In the late stages of the disease there is very extreme and severe hypertonia.

The sequence of the clinical manifestations are listed in Table 1.

TABLE 1

SEQUENCE OF CLINICAL MANIFESTATIONS

<i>Age of Onset</i>	<i>Primary Diagnosis</i>	<i>Manifestations</i>
Birth	Hyperuricemia	a) Urate Crystalluria b) Renal Urate Stones c) Hematuria
3-4 months	Hypotonia	a) Poor head control
6-8 months	Growth and Developmental Retardation	a) Poor growth and slow development
8-12 months	Cerebral Palsy	a) Involuntary Movements of extremities b) Flinging Movements of extremities c) Exaggerated startle to noise d) Opisthotonus Spinus
12-24 months	Choreoathetosis	a) Dysarthria b) Dysphagia c) Dystonia
18 months-18 years	Self Mutilation	a) Biting lips b) Chewing fingers c) Head banging d) Poking eyes
20-30 years	Gout	a) Arthritis b) Renal failure

At birth, there is no clue except a previous family history and an elevated uric acid concentration in the blood frequently to levels of 20 mg per 100 ml (normal is less than 5 mg per 100 ml). In the neonatal period, the parents may observe orange colored crystals on the diapers. Recurrent episodes of fever of unexplained origin and vomiting are common during infancy. These infants may have polyuria and polydipsia and become dehydrated easily during minor illness. Uric acid crystals may be deposited in the tubular cells and the patient may actually develop nephrogenic diabetes insipidus in later life. Another manifestation of uric acid deposition in the tissues is the development of gouty arthritis at an early age.

At 6-8 months of age most of these infants will be developmentally retarded. They not only do not learn new things but they seem to be forgetting what they have already learned. Usually by 12 months of age, choreoathetoid movements will be noted. These involve all four limbs with continuous movement of the fingers and toes. Frequently they will have flinging movements of the extremities, especially the legs, which may represent an exaggerated startle reflex to noise.

Self mutilation is one of the least constant characteristics of the syndrome. Self mutilation may not occur in early childhood but appear later. One child was reported to be 18 years old before he started biting himself and banging his head³. Dr. Seegmiller has noted that when you pull their teeth to prevent lip biting, they will often try to poke out their eyes or some other self destructive activity. In the older children (14 or 15 years of age) they usually want to be restrained because they are terrified of hurting themselves. Bizarre patterns are common; they may poke their eyes with the left hand, and if you tie this hand, they won't poke their eyes with their other hand. It was the initial thought they only wanted to destroy themselves; however they may try to destroy others also. Frequently this is the person caring for them like the mother or the nurse. Between episodes, these children usually have a nice smile, are well liked, and are pleasant. Their behavior takes on a compulsive repetitive pattern; a child who bites his lip will always bite his lip or one who pokes his eyes will always poke his eyes, etc.

The megaloblastic anemia seen in these children is not caused by folic acid or vitamin B₁₂

deficiency but is perhaps related to the absence of the enzyme H6-PRTase in the erythrocytes. Administration of B₁₂ or folic acid has no effect on the anemia, however the oral administration of adenine has been shown to correct the anemia.

The cardinal clinical features are summarized in Table 2.

An outline for the laboratory diagnosis is shown in Table 3. By isotope dilution these patients can be shown to have an increased uric body pool, (more uric acid in their body than the normal). The usual amount of uric acid in a normal adult male is 1-2 grams. About 50 to 85% of this will be excreted within a period of 24 hours.⁴ Children with this defect however will excrete 2 or 3 times their total body pool in a single day. The patient we are discussing had a uric acid/creatinine ratio of 4.5:1. Normally, the uric acid/creatinine ratio is less than 1; i.e., creatinine excretion exceeds uric acid excretion. There are other disorders which have increased uric acid excretion and a ratio above 1. These include mongolism (Down's Syndrome), adult gout, and glycogen storage disease.⁵

The defect in Lesch-Nyhan syndrome is an absence or a decrease of the enzyme hypoxanthine-guanine phosphoribosyl-transferase. This enzyme is necessary for the reutilization of purines by the body. In its absence ribonucleotides are converted to uric acid and excreted in the urine. The activity of this enzyme may be measured in erythrocytes or in fibroblasts grown in tissue cul-

ture. The highest concentrations of this enzyme is usually found in the basal ganglia which may explain the neurological disease seen in these children.

The gene responsible for this syndrome is on the X chromosome. It is inherited as an X-linked recessive abnormality, that is passed from grandmother to mother to son. The grandmother who is a carrier should pass the trait to 50% of her daughters and approximately 25% of the grandsons should have the disease. Some examples of X-linked diseases are glucose-6 phosphate dehydrogenase deficiency, color blindness and hemophilia.

Xg typing is now feasible. The Xg gene produces an antigen that is transmitted as an X-linked dominant. In the absence of this antigen, a portion of this X chromosome must be absent which coincides with the X-linked recessive traits. Xg typing of mothers of children with Lesch-Nyhan Syndrome have shown the Xg antigen to be absent.³ Sisters of the patient or sisters of the mother should be typed for the Xg antigen because if they have the Xg antigen, they probably do not carry the trait and their male offspring will be normal. If they are Xg antigen negative, one would predict that one-half of the sons will have the disease and one-half of the daughters will carry the trait. The order of genes on the X chromosome are currently thought to be Xg, glucose-6-phosphate dehydrogenase, color blindness, and hemophilia.

Differential Diagnosis of Hyperuricemia: Hyperuricemia may result from increased intake of purines from the diet, increased de novo synthesis, decreased excretion of uric acid, or increased cellular breakdown. In hematologic disorders such as hemolytic anemia and following treatment of acute leukemia, massive destruction of cells releases purines into the blood stream with subsequent hyperuricemia. Starvation, dehydration, and diabetic acidosis with dehydration also represent catabolic states where increased tissue destruction contributes to the hyperuricemia. In the latter two, decreased renal excretion adds to the problem. There are many drugs which increase uric acid synthesis and cause hyperuricemia: i.e., the thiazide diuretics, Diamox, alcohol, and salicylates. Epinephrine, norepinephrine, and angiotensin II inhibit renal excretion of uric acid, resulting in an accumulation in the plasma. Chronic renal disease causes hyperuricemia be-

TABLE 2
CARDINAL CLINICAL FEATURES

1. Hyperuricemia
2. Developmental Retardation
3. Cerebral palsy (choreoathetosis, spasticity)
4. Bizarre, Self mutilating aggressive behavior
5. Male
6. Megaloblastic anemia

TABLE 3
LABORATORY DIAGNOSIS OF L-N SYNDROME

1. Elevated Serum Uric Acid (>6 mg/100 ml).
2. Increased urinary excretion of uric acid.
3. Increased urinary uric acid/creatinine ratio. (>1.0)
4. Increased incorporation of isotopically labeled glycine 1-¹⁴C into urinary uric acid.
5. Decreased activity of the enzyme Hypoxanthine-Guanine Phosphoribosyl transferase.
 - a) Rbc's
 - b) Tissue culture
6. Negative for Xg Antigen (Xga-) (Mother).
7. Increased activity of the enzyme Adenine Phosphoribosyl transferase.

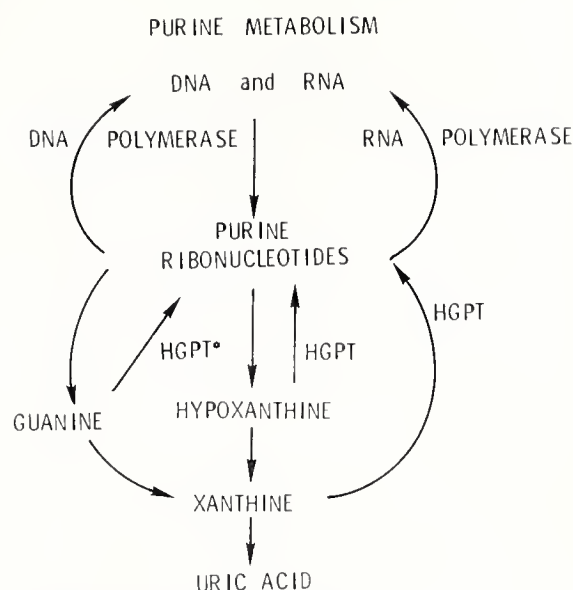
cause of decreased glomerular filtration and tubular secretion of uric acid. Children with Type I glycogen storage disease have hyperuricemia from early life and may have symptoms of gout after the first decade of life. The increased serum lactate and "ketone bodies" in this disease reduce the renal clearance of uric acid. Mongolism is associated with hyperuricemia, but the precise mechanism for this is not known. Evidence has been presented that both white cells and red cells have a shortened life-span in mongolism. If this is true, the mechanism could be increased nucleic acid breakdown associated with this accelerated cell turnover. Gout is usually not manifest in childhood and the hyperuricemia associated with gout is probably due to an increased de novo synthesis of purines and not to a block in nucleotide reutilization. Hereditary fructose intolerance is associated with hyperuricemia. Fructose infusion in normal individuals causes a sharp rise in serum lactic acid. Renal retention of uric acid results but there is also an increased urinary excretion, which suggests increased de novo synthesis.⁷ This normal metabolic response is aggravated in hereditary fructose intolerance.

Finally, the disorder being discussed is genetically marked by the hyperuricemia.

A simplified version of purine metabolism is shown in Figure 1. When the enzyme, HGPTase is absent, the flow of purine ribonucleotides is down-hill to Xanthine with no return up-hill to activated ribonucleotides which can serve as substrates for DNA or RNA polymerase.

TABLE 4
DIFFERENTIAL DIAGNOSIS OF HYPERURICEMIA
IN CHILDREN

1. Hematological Disorders
 - a) Acute Leukemia (following therapy)
 - b) Hemolytic Disorders
2. Starvation
3. Dehydration
4. Diabetic Acidosis
5. Hyperuricacidemic Drugs
 - a) Diuretics
 - b) Salicylates
 - c) Pyrozenamide
 - d) Epinephrine
 - e) Norepinephrine
 - f) Angiotension II
6. Chronic Renal Disease
7. Glycogen Storage Disease
8. Mongolism
9. Gout
10. Hereditary Fructose Intolerance
11. Lesch-Nyhan Syndrome



HYPOXANTHINE-GUANINE PHOSPHORIBOSYL TRANSFERASE

Figure 1

Thus, the enzyme deficiency can interfere with the resynthesis of DNA and RNA if the de novo synthesis of the purine ribonucleotides is insufficient for cellular demands.

The conversion of hypoxanthine and xanthine to uric acid is catalyzed by the enzyme, xanthine oxidase. The current approach to therapy is the use of inhibitors of xanthine oxidase.

The drugs which have been used to treat gout in adults primarily promote the excretion of uric acid. Probenecid and high doses of salicylates are examples of this class of drugs. Inhibitors of purine synthesis (azoserine and 6-mercaptopurine) have been tested in patients with gout but are too toxic for continued use. Furthermore, the biochemical mechanisms which explain classical gout and Lesch-Nyhan Syndrome are opposite; the former represent an over-synthesis of purines and the latter a failure of reutilization of purines. Thus, the theoretical basis for therapy of the two diseases are different.

Allopurinol is a structural analogue of hypoxanthine and xanthine. This drug is a xanthine oxidase inhibitor and blocks the conversion of hypoxanthine and xanthine to uric acid. During therapy these children are converted from uric acid excretors to xanthine excretors.⁸

In the management of these children, Allopurinol has been effective in reducing the blood uric acid content and uric acid excretion. This prevents uric acid deposition in the kidneys and joints. The solubility of uric acid in the urine at pH 5.0 is 15 mg per 100 ml.; at pH 7.0 uric acid stays in solution in concentrations up to 200

mg per 100 ml. Xanthine is also more soluble at the higher pH. Alkalinization of the urine may prove to be a necessary adjunct for the prevention of renal failure by both increasing the solubility of xanthine and uric acid in the tubular fluid. Allopurinol also decreases the synthesis of uric acid about 40%. The mechanism of this action probably involves xanthine or hypoxanthine at an early step in the biosynthetic pathway of the purines. The initial dose of Allopurinol is 5 mg per kg and this dose is adjusted to maintain the serum uric acid at less than 5 mg%.

Drug control of the self-destructive behavior and hyperactivity has not been satisfactory. Recent reports suggest Valium may be beneficial. Oral administration of adenine has also been used in the treatment of these children. It is reported to improve the anemia and decrease de novo purine synthesis perhaps by feedback inhibition of the first rate limiting step in the pathway.

The adenine is converted to dioxyadenine by xanthine oxidase which is toxic to the kidney therefore Allopurinol is helpful by blocking the action of xanthine oxidase.

Is there any way of detecting the heterozygote in the female?

Yes, the heterozygote may be detected by culturing skin fibroblasts. The HG-PRTase activity of the heterozygote fibroblast is approximately $\frac{1}{2}$ the enzyme activity found in normal fibroblasts. Fibroblasts from patients with the disease have almost no activity (1% of normal). There is poor correlation between enzyme level and the severity

of the disease. Early studies suggest the heterozygote can also be identified by an intermediate enzyme concentration in the erythrocyte.

Are they always retarded?

No, they are not. The other child we are following has an IQ of 97 at age 8. However, the majority of patients are intellectually retarded.

Would you mention amniocentesis?

The prenatal diagnosis can be made by culturing cells from the amniotic fluid and measuring HG-PRTase activity.

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LEGENDS

TABLE 1: Sequence Of Clinical Manifestations

TABLE 2: Cardinal Clinical Features

TABLE 3: Laboratory Diagnosis of L-N Syndrome

TABLE 4: Differential Diagnosis of Hyperuricemia in Children

FIGURE 1: Purine Metabolism



Reliability of Central Venous Pressure as Indicator of Left Atrial Pressure

H. Bell, D. Stubbs, and D. Pugh (Univ of Kansas Medical Center, Kansas City 66110)

Chest 59:169-173 (Feb) 1971

Central venous pressure (CVP) measurements have been used extensively in the management of critically ill patients. The value of CVP determinations was studied by determining the relationship of left atrial and right atrial pressures in 200 patients undergoing transseptal heart cath-

eterization. All patients had mitral valve disease. The correlation coefficient of left atrial and right atrial pressure was 0.48. Low right atrial pressure (below 3 mm Hg) was seen in 18 of 91 patients with left atrial pressure 20 mm Hg or greater. In 25 patients, acute pressure changes were induced by volume expansion, pacing, or drug infusion (isoproterenol or phenylephrine). Increases in left atrial pressure frequently failed to be reflected in right atrial pressure changes. Central venous pressure may be misleading as a guide to left atrial pressure.

Gastric Ulcer: Benign or Malignant?

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The ultimate differentiation of benign and malignant gastric ulcers is obviously histopathologic examination of the involved tissue. However, in recent years, many authors have emphasized the high degree of accuracy of roentgenographic examination. Formerly, many physicians depended almost exclusively on location of the ulcer to differentiate the benign lesion from the malignant. Other criteria are now known to be more accurate.

The purpose of this article is to review the more valuable roentgenographic signs in differentiating the benign gastric ulcer from the malignant.

Benign Ulcers

The ulcer niche represents the crater of the lesion. When viewed in profile, the crater projects or penetrates outside the expected lumen of the stomach (Figure 1). The crater margins are usually smooth, but tend to undermine the edge slightly, so that the crater base may be somewhat

larger than the crater neck. When the crater is seen in a true profile view, a lucent line, 1 or 2 mm in width, (Hampton's line) is sometimes seen, representing the undermined mucosa (Figures 1 & 2). Most authorities feel that Hampton's line is pathognomonic of a benign ulcer. The ulcer collar is created by the circumferential fold formed by thickened submucosa and mucosa surrounding the crater (Figure 2).

Mucosal folds traversing the ulcer collar and extending to the edge of the crater are characteristic of benignancy (Figure 3).

The ulcer mound represents extensive tissue mass around the crater caused by edema and lack of distensibility of the gastric wall. The benign crater is usually associated with a smooth, sharply delineated mound surface, the margins of which form a smooth obtuse angle where they join the adjacent normal gastric mucosa (Figure 4). The benign ulcer is usually centrally located within the mound.

Occasionally, a centrally located blood clot in the base of the crater attests to benignancy.

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BENIGN ULCERS --- PROFILE VIEW

1



Simple crater
with Hampton's line

2



Crater with ulcer collar
and Hampton's line

3



Ulcer with
radiating folds

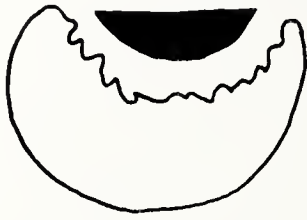
4



Ulcer crater
in large mound

MALIGNANT ULCERS

5



**Carman Complex
profile view**

Benign ulcers should disappear with medical therapy without significant residual anatomic distortion.

Malignant Ulcers

In ulcerated gastric carcinoma, there is usually evidence of a fixed filling defect or a "scirrhous" area surrounding the crater. The ulcer crater usually does not penetrate beyond the expected lumen of the stomach, and is commonly eccentrically located within the mound.

The Carman complex is seen as a crescent-shaped ulceration within a nodular semicircular defect. Transition from normal gastric mucosa to the mound is abrupt, acute, irregular and nodular (Figure 5).

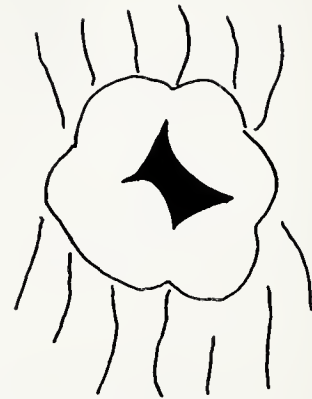
Some evidence of nodularity is seen in the crater base, the crater edge, or surrounding tissue (Figure 6). Lack of the normal mucosal pattern and absent or decreased distensibility suggest malignancy.

The malignant ulcer may show some initial attempt at healing on medical therapy, but usually does not disappear. Also, local rigidity, absence of the normal mucosal pattern, and/or a filling defect persists and progresses.

Reliability of Roentgen Diagnosis

A properly conducted roentgen examination of the stomach can detect and differentiate benign from malignant gastric ulcers in approximately 85-90% of cases. At times, due to the condition of the patient, examination is difficult and it may not be possible to adequately visualize the entire stomach. Retained food and fluid cause errors in diagnosis. These factors must be

6



**Malignant ulcer
En face view**

considered in interpretation of the examination, however the overall accuracy of the roentgen examination of the stomach is extremely good in the detection of gastric lesions.

Many authorities feel that roentgen evidence of a benign ulcer is accurate enough in most cases to justify a trial of medical therapy. Follow-up examinations at 2 to 3 week intervals should be done. Lesions which do not heal promptly should be further investigated, either gastroscopically or surgically.

Summary

The roentgenographic characteristics of benign and malignant gastric ulcers are reviewed. The most reliable signs of benignancy are: (1) penetration, (2) mucosal folds radiating to the edge of the crater, (3) Hampton's line, (4) benign appearing ulcer mound as seen in profile, and (5) centrally located blood clot in the base of the crater.

The most reliable criteria of malignancy are: (1) Carman complex, (2) abrupt areas of transition around the crater, and (3) definite evidence of nodularity of the crater base, edge or surrounding tissue.

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ELECTROCARDIOGRAM

OF THE MONTH

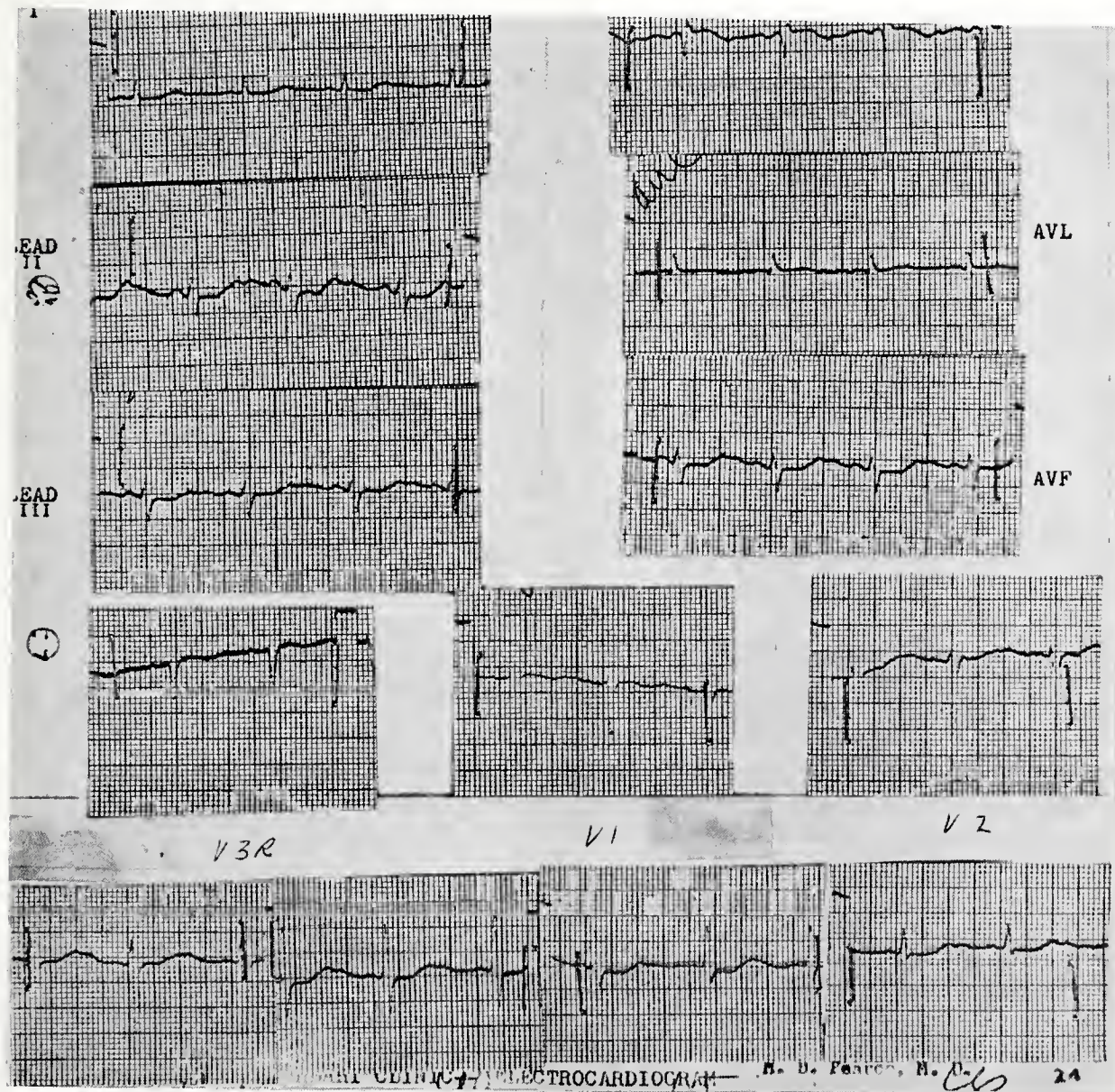
AGE: 54 SEX: Male BLOOD PRESSURE: Normal

CARDIAC DIAGNOSIS: Undetermined.

OTHER DIAGNOSIS: Gastric outlet obstruction due to ulcer.

HISTORY: Presented with above complaint and had autrectomy few days later.

(See answer on page 226)



The Department of Cardiology, University of Arkansas Medical Center
J. C. Kizziar, M.D., Fellow, Cardiology



Protection of Arkansas' Milk Supply

E. J. Easley, M.D.*

Throughout history food has been one of man's major concerns. Of all foods, none surpasses milk as a single source of those dietary elements needed for the maintenance of proper health. Yet over the years, mishandling of milk—whether from ignorance, carelessness or other reasons—has often led to illness and even death.

When Mrs. Modern Arkansas Housewife selects dairy products, she not only has the right to expect these products to be free from disease-producing bacteria, she demands a product that is of consistent quality. Here we are referring to flavor, odor, temperature, butterfat, packaging and all other highly desirable qualities of a good product. The old saying that "milk is nature's most perfect food" is certainly true, not only for people but also for many disease-producing and spoilage bacteria. Milk is highly susceptible to odors and flavors, which, while not harmful to humans, do spoil the flavor of the product.

To protect the safety of milk and milk products as well as the desirable flavor and keep quality, the Milk and Dairy Products Division of the Arkansas State Department of Health, with the assistance of other health officials, the dairy industry and supplying industries has developed one of the most intense quality control programs ever devised.

In order for you to have a better idea of the modern day quality control program as now practiced, let us take a brief look into the past to see what brought about this need.

Market milk at the turn of the century consisted of families keeping one or more cows for

their own use. Individuals without cows purchased milk from neighbors and there was little effort to protect or control the quality of milk. The first milk "plant" in Arkansas was opened in 1902 at Third and Rock Street in Little Rock. It consisted of a milk room for cooling the milk and putting in cans for delivery by wagons. All of the milk was raw and deliveries were often made twice a day because the milk would not keep. As expected, the quality of the milk was not always good. Milk and milk products were seldom standardized or pasteurized and had none of the desirable qualities demanded by the modern consumer. In periods of shortages, it was not uncommon to "stretch" the milk supply by adding a little water.

As the size of the industry grew, there were more food poisoning cases due to poor quality, as well as epidemics of milk-borne diseases. The new knowledge of the relationship of microorganisms to disease and the growing awareness of the importance of safe foods to public health were immediate causes of improvements.

Probably the greatest single impetus to the control of milk quality was inaugurated when the United States Public Health Service started a study of the relationship of milk to public health, in 1907. This study evolved into the publishing of a standard Milk Ordinance and Code (the Pasteurized Milk Ordinance) which has done more to influence the thinking of milk sanitarians and establish uniformity in milk legislation than any other document. This Ordinance serves as the "bible" for the Arkansas Dairy Law and the Rules and Regulations Per-

*Acting Director, Division of Public Health Education.

taining to Grade A Milk and Milk Products which is the legal basis that governs all milk and dairy products in the State (production, processing, distribution and importation). In administering these requirements, the Milk and Dairy Division of the Arkansas State Department of Health conducts surveillance programs to protect the consumers of milk and dairy products from adulteration, misbranding and false advertising during production, processing, storage and distribution. The Department also conducts surveys and reviews and approves plans for new construction, inspects Grade A manufacturing plants and collects samples. A complete equipment test is made quarterly on pasteurization equipment and controls.

Last year licenses were issued to 968 State pasteurization plants, manufacturing milk plants,

frozen dessert plants and soft ice milk establishments and to 53 out-of-state plants.

To assure product safety, the Department made the following inspections and/or investigations: 1,303 milk processing plants; 516 producer dairies; and 36 milk trucks. Tests were made on 1,343 cans of milk for sediment, 774 pieces of equipment and control tests were made on pasteurization equipment. The Division collected 2,139 dairy product samples.

Annual surveys are also made of all single service milk container fabricating plants in the State for testing as approved sources for supply in the Interstate Milk Shippers Quarterly Report.

These statistics are only a small part of the endeavor to give the public an adequate and safe supply of "nature's most perfect food".



O B I T U A R Y

Dr. Allaire J. Dunklin

Dr. Allaire J. Dunklin of Searcy died October 24th, 1971, at the age of seventy-one. He had practiced medicine in Searcy since 1933; prior to that time, he was associated with the Monroe County Health Unit for several years.

Dr. Dunklin was a graduate of Washington University in Saint Louis, Missouri. He received his medical education at the University of Arkansas School of Medicine.

Dr. Dunklin was a member of the White County Medical Society and the Arkansas Medical Society. He was a member of the First United Methodist Church.

Survivors include his wife, Mrs. Pauline Harb Dunklin, and two nephews.

Changes in Smoking Habits in Males Under 65 Years After Myocardial Infarction and Coronary Insufficiency

D. R. Hay and S. Turbott (Princess Margaret Hosp, Christchurch, New Zealand)
Brit Heart J 32:738-740 (Nov) 1970

Of 370 men under 65 years of age with acute myocardial infarction, 74% were smokers at the time of hospital admission. When interviewed up to two years later the proportion of smokers among the 296 survivors had fallen to 44%. The number smoking more than 20 cigarettes a day fell from 137 (37%) to 18 (6%), and 38 of the former group stopped completely. At least half of the survivors made some reduction in their smoking. Among 59 patients with acute coronary insufficiency, the percentage of smokers dropped from 75% to 60%. Of the nonsmokers at the time of infarction, 15.5% died after discharge, compared with 23.4% who were moderate or heavy smokers when admitted. Significant numbers of patients stop smoking after infarction but the effect on ultimate prognosis cannot be assessed from the present data.



EDITORIAL

Malpractice and the Physician

Alfred Kahn, Jr., M.D.

Part I

Leaving the strictly legal interpretations of malpractice to the judiciary, one can generalize and say that it implies bad practice. This meaning is certainly the public's understanding of malpractice. To physicians, it is a dread word and means at best a shattering experience and at worst a cataclysmic destruction of a hard earned professional career. The word implies an all or none situation without variation, degree of disrepute, or spectrum from mild to severe. Of much less importance to the physician is the potential loss of money. A business lawsuit carries none of the implications suggested by the term malpractice; eventually, most firms are involved in some type of litigation, and the principal worry is financial loss, as implied non-performance or implied improper performance are generally not held against the firm's reputation.

The physician generally is held in high esteem in America. He is generally held in high esteem throughout the world. Physicians in America are prosperous, more than elsewhere. Physicians in America are as well trained or better trained than in other countries. Physicians here are no more or less guilty of human foibles than elsewhere. Why then is the American physician afflicted with an avalanche of malpractice suits in comparison to the rest of the world? The only answers which seem to fit these premises are: 1. The physicians of America are a surer target for financial recovery. 2. Dissatisfaction with the delivery of medical care by private practice. American physicians have a great investment in medical education in terms of time and dollars. A young physician may start practice with debts of tens of thousands of dollars; he is usually in his late

twenties or early thirties before he begins practice — and he may have quite a lag before he is self supporting. Based on his investment in time and money, the physician's income does not seem disproportionate when compared to an airplane pilot making \$50,000 or more per year or tradesmen earning \$50 per day or more. Despite any rational explanation of a physician's income, there will be a segment of the general public who look with jealousy at some financially more successful citizen; it is irrational but it is human nature and it is present. Regarding dissatisfaction of the system of medical care as a cause of patient dissatisfaction, one can muster news reports and statistics to fit either side of the continuing argument of private practice versus socialized or state medicine. However, there is one thing that is certain — a private citizen would have very little chance of recovery for alleged malpractice if the physician were employed by the government; such suits would be too lengthy, too interlaced with government regulation, and too dubious of worthwhile return to justify the costly process of suing the U. S. Government. Private practice in America is doing a good job of delivering medical care, but there will always be dissidents and this small segment of the public will avail themselves of the courts if they feel their medical care has been improper. In context, the real reason there is private medical care in America is because the U. S. A. stands for free enterprise in the accepted legal and ethical sense; private medicine is natural and expected in a country which is founded on the capitalistic system, just as socialized medicine is natural in a socialistic state. Why socialize med-

icine in a free enterprise society unless the system is self-destructive due to grave inherent faults, which is not the case. Private practice of medicine is just a facet of the overall pattern of American economic life. Socialize medicine — then why not socialize industry and ultimately regiment the entire core of our living and work existence. The ability to express dissatisfaction with a physician is one price of private medicine, but the format and forum is certainly unwise.

If a patient is dissatisfied with his medical care, he usually consults another physician. The consulting physician or peer is really the cornerstone and measuring stick for determining the propriety, either medical or ethical, of the first physician's treatment. It is here the unfair complaint against a physician can be tactfully reviewed; further, it is here that a few simple

words of explanation may make the difference between an odious suit and a satisfied patient. Careful analysis would indicate that many malpractice suits are fomented by careless colleagues. If the patient's complaint has merit, the reviewing physician should be candid, but this is not to say that a legal proceeding is the proper avenue of redress.

The hard kernel of truth is that medical science is an inexact discipline with many areas where the decision is one of judgment and opinion rather than proved hard and fast rules. This being the case, there will always be differences of opinion and the profession has a duty to explain to the uncomprehending patient the limitations of medical knowledge and the necessity for making seemingly rational opinions, which subsequent events may prove to be wrong.



MEDICINE IN THE



THE MONTH IN WASHINGTON

Health, Education and Welfare Secretary Elliot L. Richardson approved a proposed regulation to authorize insurance carriers to issue contracts for prepaid group medical service to persons in any state regardless of any restrictive state law.

Authority for the proposed regulation was granted by Congress last year in a law sponsored by Sen. Edward M. Kennedy (D.-Mass.) who also is the chief Congressional sponsor of organized labor's all-out national health insurance proposal. Under the terms of the law, the secretary of HEW can authorize insurance carriers who provide coverage through the Federal Employee Health Benefits program to issue contracts for the group medical services.

Forty-one prime health insurance carriers presently provide coverage through FEHBP. The actual number of insurance carriers affected by the law could total in the hundreds because of reinsurance contracts between prime carriers and other insurance providers, according to a spokes-

man for the department's Office of Group Practice Developments.

The regulation allows the HEW secretary to authorize the insurance companies "to issue in any state contracts entitling any person as a beneficiary to receive comprehensive medical services from a group practice unit or organization" with which the company has contracted for the provision of group services.

The proposed regulation would be to override those restrictions, "enabling insurance carriers to issue contracts for prepaid group medical services to any individual in any state," an HEW announcement said.

HEW said as many as 50 million residents of the 20 states with laws restricting group practice could become eligible for group health plans.

Such plans, as described in the proposed rules, offer preventive, diagnostic and therapeutic medical services in a single organization on a prepaid basis.

"A medical group . . . shall include at least a general practitioner and representatives of each of

the following medical specialties: general surgery, obstetrics, internal medicine, pediatrics and ear-nose-throat," the proposal said.

Kennedy applauded HEW's move but criticized the delay.

"The cause of the delay is no secret," he said in a statement. "For months the profitmaking commercial industry fought to obtain a larger role."

He said that while the intent of Congress prevailed the delay shows "the virtual stranglehold the health insurance lobby has on this administration."

* * *

The American Medical Association told Congress that the attack on cancer can be most effectively conducted through the National Cancer Institute within the National Institutes of Health, rather than through a separate and autonomous agency.

Testifying before the House Health and Environment Subcommittee, Franz J. Ingelfinger, M.D., editor of the *New England Journal of Medicine* and a member of the Advisory Committee on Medical Sciences to the AMA's Board of Trustees, said that "the effort to cure cancer will have to be a coordinated effort with full involvement of all the national institutes (of health)."

"There is another compelling reason to retain the cancer program within NIH and that is to keep the NIH intact rather than have it become fragmented into independent agencies," Dr. Ingelfinger said. "Under the latter conditions the agencies would be competing for support and recognition rather than collaborating for scientific progress. The NIH is generally regarded in the international scientific community as one of the most splendid scientific achievements of the 20th century. To impair the effectiveness of this productive organization would be unwise. The integrity of the NIH should be maintained and increased support provided."

Dr. Ingelfinger expressed opposition to a compromise measure passed by the senate which would create a new independent Conquest of Cancer Agency within the NIH. He said that the autonomy proposed for such a new agency would "threaten the structure of the National Institutes of Health and impair research efforts in all fields."

Dr. Ingelfinger cautioned against expecting any quick victory over cancer.

"We believe . . . that false hopes should not be created and that people should not be led to believe that with enough money and enough effort cancer will quickly be conquered," Dr. Ingelfinger said. "Although many encouraging developments have occurred in the last few years that justify the major national effort proposed in House Bill 10681, the problems to be solved are very complex. Much basic research work remains to be done. Everyone should be prepared for steady but perhaps slow progress. We should also recognize that chance discoveries by scientists working in totally different fields may set the stage for significant future progress. This has occurred repeatedly in the history of scientific discovery, and consequently basic scientific research should be allowed a high degree of individuality and spontaneity."

"... the American Medical Association advocates a program attacking cancer through greatly intensified and coordinated research efforts. We believe that in the interests of the public and in order to avoid any splintering of efforts, the program, adequately funded, should be administered within the National Institutes of Health under a Director having responsibility for all biomedical research."

Other AMA presentations on national legislation:

Physician Shortage Areas

The AMA supported legislation that would provide federal aid to individual or small groups of physicians in establishing medical practices in rural areas, small towns and low income inner-city areas.

The legislation (S. 2269) would amend the National Housing Act to authorize mortgage insurance for the construction and rehabilitation of medical facilities for the practice of one to four physicians in physician-shortage areas. In 1966, mortgage insurance was authorized for establishment of non-profit group practices. The current legislation would extend that program.

Dr. John M. Chenault, a member of the AMA Board of Trustees, spoke for the Association. He said, "One of the problems in our health delivery today relates to a shortage of necessary manpower, as well as the lack of proper distribution. The shortage is particularly emphasized

in rural areas and areas of low income. The failure of such areas to attract physicians can be attributed to many factors—tangible and intangible—and the problem is a complex one. We should, however, provide incentives and encouragement to physicians to meet the needs of those areas.

"The American Medical Association supports a pluralistic system of delivery of health care embracing various forms of health care delivery. Each type of health care delivery mechanism, including group practices, has its advantages. The group-type of practice, however, is neither feasible nor desirable for all of the nation's physicians . . .

"It is readily apparent that not all areas will attract the same kind of group practice, nor could a rural area support the establishment of the same type of practice as might be set up in larger, more urban communities.

"S. 2269, by providing financing assistance, may help to stimulate the establishment of a medical practice by an individual practitioner or a small group of physicians in small and rural communities and inner city areas having physician shortages.

"In considering these amendments, we believe the provisions in the bill concerning the maximum loan should be reviewed. We recommend that the limitation of \$150,000 should be raised so as not to preclude the establishment of a facility with potentially broad health delivery capability where such facility and staff were warranted in a community. The figure proposed in the bill might act to limit construction of beneficial facilities in certain areas."

National Institute for Health Care Delivery

The AMA questioned the desirability of establishing a National Institute for Health Care Delivery.

In a letter to Sen. J. Glenn Beall, Jr. (R.-Md.) who made the proposal and invited AMA's comment, Ernest B. Howard, M.D., AMA executive vice president, said:

"As we understand your proposal, a National Institute of Health Care Delivery would be established, for the purpose of developing improvements in health care delivery, the Institute being perhaps comparable to NIH and NASA. Through the use of "think tanks" and develop-

mental labs, the institute would examine our existing health care system and design and test components of a new one.

"Our health delivery system is constantly responding to improvements in medicine as they are developed. These changes occur through many means—the medical schools, university and other hospitals, clinics, continuing education (both formal and informal), and community practices of all types. One of the strengths of our health care system is its pluralistic nature which can absorb and respond to changes as new medical and scientific knowledge is developed.

"Your pursuit for improvements in our health care delivery is a most laudable one, and one in whose objectives the medical profession shares. We have some reservations, however, as to whether improvements in our health delivery system can respond in the laboratory in the same manner as medical or scientific research or the NASA program. Many of the elements of our health care delivery, some referred to in your comments, are currently under careful examination and experimentation.

"Your proposal would apparently parallel in many respects the National Center for Health Services Research and Development, only recently created, and it is not clear how the two would relate to each other. Perhaps an expansion of activities of the existing center should be the vehicle for the contemplated programs."

Military Medical School

The AMA opposed establishment of a military medical school.

Testifying before the House Armed Services Committee, Bland W. Cannon, M.D., a member of the AMA's Council of Medical Education, said:

"... We cannot emphasize too strongly that our concern is that the men and women in our uniformed services should receive nothing less than the best in medical care. There is no reason why they should not continue to receive care from physicians trained in a medical education system which has proven itself to be unexcelled. We support an expansion and greater utilization of this system rather than the development of a new and different kind of institution . . .

"One aspect of the nation's goals for more physicians is the need of the uniformed services, and it is to this one aspect that H.R. 2 is directed. The AMA believes it is vital that the number of physicians in the uniformed services be adequate to enable them to carry out their missions, and that those physicians be thoroughly trained and competent in order that those serving our country in the uniformed services might receive the best possible medical care. However, it is doubtful that these objectives can best be realized through establishment of a separate uniformed forces medical school, as called for in H.R. 2.

"In our opinion, it would be very unwise to establish a separate medical school specifically to train physicians for the uniformed services in which all, or a significant portion, of the physicians serving in these forces would receive their medical training. We believe it is very important that the armed forces take full advantage of the resources and facilities of the existing medical schools of the United States in training their medical manpower, and that such training not be restricted in any degree to a single school

established for that purpose. We also believe that it would be possible to train larger numbers of physicians in a shorter period of time, for a lesser cost if the existing schools are used."

The AMA supported provisions in the legislation for helping medical students with scholarships with a requirement that they serve on active duty for a number of years after completion of training, and utilizing military medical facilities for the training of future military medical officers.

The AMA said that through affiliation agreements between existing medical schools and the armed services, "larger numbers of physicians could be produced for the uniformed services at substantially lower costs, in a shorter period of time, and with the quality of the medical education assured."

Despite the opposition of the AMA and the Association of American Medical Colleges the committee unanimously, 31-0, approved the bill. The legislation would authorize a medical student scholarship program of \$210 million over the next five years. The military medical school would be built in the Washington area.



The quarterly luncheon meeting of the White County Medical Auxiliary was held October 27th at the Searcy Country Club in Searcy. Mrs. Harold D. Langston, president of the Woman's Auxiliary to the Arkansas Medical Society, was the guest speaker. The president-elect of the Auxiliary, Mrs. W. Myers Smith of North Little Rock, also attended the luncheon.

ANSWER—Electrocardiogram of the Month

RATE: 77 RHYTHM: Sinus

PR: 0.13 sec. QRS: 0.09 sec.

SIGNIFICANT ABNORMALITIES:

St depression in II, III, AVF, V2 to V6 associated with U waves overriding the T waves; serum potassium on day of this ECG was 2.8.

INTERPRETATION: Abnormal
Hypokalemia

ADDENDUM: ECG done two days later was completely normal when serum potassium was 4.7.



PERSONAL AND NEWS ITEMS

Physician Honored by Medical Assistants

Dr. Merlin J. Kilbury, Jr., of Little Rock, was named Boss of the Year by the Pulaski County Medical Assistants Society at its annual Bosses Night Dinner on October 14th.

Dr. Saltzman Elected to Board

Dr. Ben N. Saltzman of Mountain Home was elected a member of the Board of Directors of the National Association for Retarded Children at its annual convention held in Denver, Colorado, in October. Dr. Saltzman is president of the Arkansas Association for Retarded Children. The National Association is the only voluntary organization devoted solely to promoting the welfare of retarded persons and their families. It is comprised of over 224,000 individual members.

Dr. Wheat Guest Speaker

Dr. Ed Wheat of Springdale was the guest speaker at the annual ladies night banquet of the Fort Smith Christian Businessmen's Committee. Dr. Wheat is a member of the Fayetteville chapter of the Committee.

Dr. Coker Named Chief of Medical Staff

Dr. Tom Coker of Fayetteville has assumed the duties of Chief of the Medical Staff of Washington General Hospital for the coming year. Dr. Coker succeeds Dr. C. Rodney Baker who served in that capacity for the past year.

Dr. Branch Attends Seminar

Dr. James W. Branch of Hope attended a seminar on "The Practical Aspects of Respiratory Care" which was held September 24th and 25th in Dallas, Texas. Dr. Branch received twelve hours credit from the American Academy of Family Practitioners for the post-graduate course, which was sponsored by the Dallas Area Respiratory Health Association and the University of Texas Southwestern Medical School.

Physicians Named Fellows

Drs. G. Glen Fincher of Fayetteville, James A. Brown and Peter J. Irwin of Fort Smith, Robert L. Hill of Hot Springs, John P. Burge of Lake Village, and R. Barry Sorrells of Little Rock, were named Fellows of the American College of

Surgeons at that organization's annual five-day clinical congress held in October in Atlantic City, New Jersey.

Dr. William D. White of Searcy was elected a Fellow of the American College of Gastroenterology at the annual meeting of the College in Atlanta, Georgia, in October.

Dr. Wells Named Diplomate

Dr. William M. Wells of Heber Springs has been named a Charter Diplomate of the American Board of Family Practice.

Little Rock Physician Receives Nomination

Dr. Joseph A. Norton has been endorsed by the Presbytery of the Ozarks as a candidate for moderator of the General Assembly of the Presbyterian Church in the United States. He was also nominated by the Presbytery as a commissioner to the 112th General Assembly, which will meet in June 1972 in Montreat, North Carolina.

Dr. Norton and his family have been honored by the Urban League of Greater Little Rock as recipients of the "Family of the Year" award.

Dr. Forestiere Attends Meeting

The 23rd Annual Scientific Assembly of the American Academy of Family Practice was held in October in Miami Beach, Florida. Dr. A. J. Forestiere of Harrisburg attended the meeting as an Arkansas delegate.

Murfreesboro Gets New Doctor

Dr. C. F. Shukers, II, recently moved to Murfreesboro, where he set up his practice in the building previously occupied by the late Dr. G. J. Floyd. Dr. Shukers formerly practiced in Mt. Ida and DeQueen. The Murfreesboro Chamber of Commerce honored Dr. Shukers and Dr. Hiram T. Ward with a coffee following a local high school football game.

Physicians Serve on College Board

The Science and Premedical Advisory Board at Harding College in Searcy held its first meeting October 22nd. Among the twenty-four members of the board, which consists of physicians, dentists, veterinarians and educators from across the Nation, are the following physicians: Dr.

Bill Dave Stewart, Chairman of the Board; Drs. Donald Browning, Bill Hefley, W. Ray Jonett, and William D. Morris, all of Little Rock; Drs. Arnold R. Brown, Hugh R. Edwards and Thomas A. Formby, all of Searcy; and Dr. James O. Pennington of Ola. The duty of the board is to advise and help Harding's science faculty plan undergraduate curriculums for science and pre-med majors.

Caduceus Club Installs New President

Dr. Nathan L. Poff of Heber Springs was installed October 16th as president of the Arkansas Caduceus Club at its third annual homecoming observance for the University of Arkansas School of Medicine. New officers elected during the meeting include: Drs. Neil Crow of Fort Smith, president-elect; John V. Satterfield, Jr. of Little Rock, first vice president; and John A. Trieschmann of Hot Springs, secretary.

Drs. Louis McFarland, Hot Springs; Purcell Smith, Jr., Little Rock; William R. Snow, Moun-

tain Home, and James Stalker, Batesville, were elected to the club's board of trustees. New liaison officers of the board include Dr. Larkus Pessnell, Little Rock, house officers representative, and Dr. Stevenson Flanigan, Little Rock, faculty representative.

Dr. Thorn Speaks at Conference

Dr. Max Thorn, Director of Medical Education at St. Vincent Infirmary in Little Rock, was one of the speakers at the first Statewide Conference on Physician's Assistants, which was held October 27th and 28th in Hot Springs.

Dr. Morris Continues to Practice at Age 96

Dr. John W. Morris of McCrory has the distinction of being acclaimed by Ripley's "Believe It Or Not," as being the oldest licensed practicing physician in the United States and possibly the world. Dr. Morris is ninety-six years of age. He began his medical practice in 1900 and in 1936 he opened the J. W. Morris Clinic in McCrory.



Chronic Cor Pulmonale

R. L. Naeye and W. A. Laqueur (Hershey Medical Center, Hershey, Pa 17033)

Arch Path 90:487-493 (Dec) 1970

A quantitative, morphologic analysis was undertaken of cardiac and pulmonary vascular structure in 188 Appalachian soft coal workers; 28% had moderate, and 30% had severe right ventricular hypertrophy. The degree of cor pulmonale best correlated with the severity of chronic bronchitis and emphysema as measured by quantitative, morphologic means. There was little correlation with the volume or the composition of dust macules. In younger miners arterial medial muscle mass significantly increased as the small pulmonary muscular arteries passed through the dust macules. This latter observation may explain the latent or mild pulmonary arterial hypertension observed in younger workers. The prevention of cor pulmonale in soft coal workers would appear to depend on preventing the development of dust macules and emphysema.

Treatment of Hypoglycemic Coma With Glucagon, Intravenous Dextrose, and Mannitol Infusion in 100 Diabetics

A. C. MacCuish, J. F. Munro, and L. J. P. Duncan (Royal Infirmary, Edinburgh)

Lancet 2:946-949 (Nov 7) 1970

One milligram of glucagon was given intramuscularly (IM) or intravenously (IV) to 100 glycemic diabetics unable to take glucose by mouth. Within 15 minutes 40 were either awake or sufficiently roused to take oral glucose; only one of the remaining 60 responded to a second injection of glucagon given 15 minutes after the first. There was no difference between the effect of IM or IV glucagon. The 59 glucagon-unresponsive patients were given 25 gm dextrose IV; 36 were awake within 15 minutes and another 4 responded to a second injection of 25 gm. The remaining 19 were still unconscious despite an adequate level of glycemia having been achieved (mean 247, range 179 to 350 mg/100 ml). They were treated with IV mannitol, dextrose, and steroids.

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FORT SMITH, ARKANSAS

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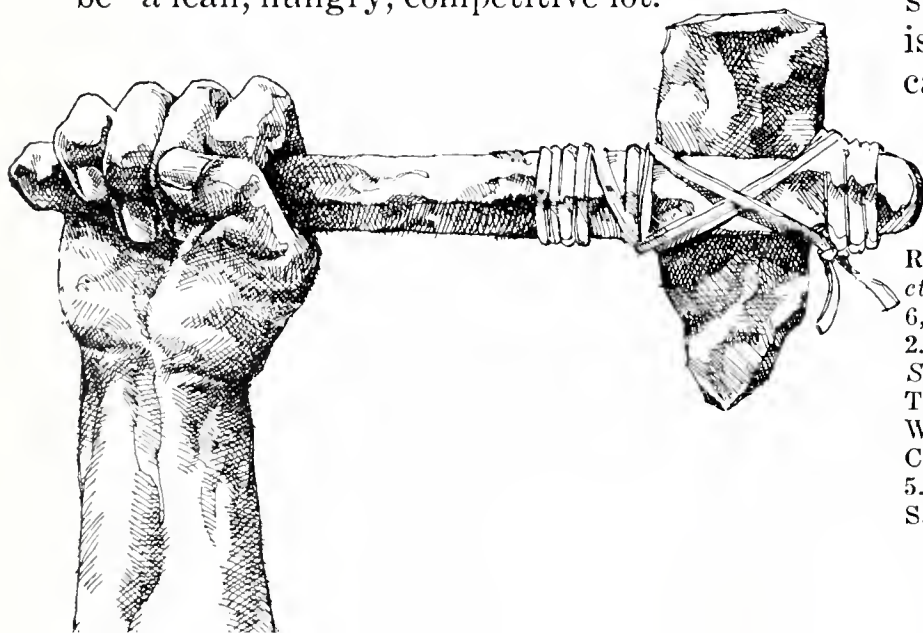


At least seventy-five out of one hundred adults with duodenal ulcers are men.¹

Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."²

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."²

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."³



Big boys don't cry. If more men cried, maybe fewer would wind up with duodenal ulcers. But men will be men—the sum total of



their genes and what they are taught. Schottstaedt observes that when a mother admonishes her son who has hurt himself that big boys don't cry, she is teaching him stoicism.⁴ Crying is the negation of everything society thinks of as manly. A boy starts defending his manhood at an early age

Take away stress you can take away symptoms

There is no question that stress plays a role in the etiology of duodenal ulcer. Alvarez⁵ observes that many a man with an ulcer loses his symptoms the day he shuts up the office and starts out on a vacation. The problem is, the type of man likely to have an ulcer is the type least likely to take long vacations or take it easy at work.

The rest cure vs. the two-way action of Librax.[®] For most patients, the rest cure is as unrealistic as it is desirable. Still, the stress factor must be dealt with. And here is where the dual action of adjunctive Librax can help. Librax is the only drug that com

References: 1. Silen, W.: "Peptic Ulcer," in Wintrobe, M. M. et al. (eds.): *Harrison's Principles of Internal Medicine*, ed. 6, New York, McGraw-Hill Book Company, 1970, p. 1444. 2. Wolf, S., and Goodell, H. (eds.): *Harold G. Wolff's Stress and Disease*, ed. 2, Springfield, Ill., Charles C. Thomas, 1968, pp. 68-69. 3. *Ibid.*, p. 257. 4. Schottstaedt, W. W.: *Psychophysiologic Approach in Medical Practice*, Chicago, Ill., The Year Book Publishers, Inc., 1960, p. 163. 5. Alvarez, W. C.: *The Neuroses*, Philadelphia, Pa., W. B. Saunders Company, 1951, p. 384.

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sterile spectinomycin dihydrochloride
pentahydrate, Upjohn
single-dose intramuscular treatment

High cure rate: * 96% of 571 males, 95% of 294 females

(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of *Neisseria gonorrhoeae* in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin medio in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

JA72 1848-G

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: Vials, 2 and 4 grams—with ampoule of Bacteria-

satic Water for Injection with Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
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Thoughts on Cancer
Tongue Cancer: Analysis of Cases in a 10 Year
Period at U.A.M.C.

Orval E. Riggs, M.D.*

The physician who treats cancer often finds himself the court of last resort. The uncertainties that accompany the diagnosis of neoplasia demand that the initial treatment be expertly planned and executed, for it is well known that subsequent measures are usually only palliative. Historically the surgeon played the dominant role in cancer therapy. The development and growth of other modes of treatment, namely radiation and chemotherapy, has extended the horizons for cancer care. It seems plausible therefore, indeed prudent, that cancer treatment be administered as a team effort following exhaustive evaluation of the patient and sober consultation between those physicians responsible for such treatment. No latitude should be allowed to personal bias. This concept has been accepted at many institutions, and hopefully will become extended to others with utmost expedience. It follows, also, that a sober and intelligent approach will reflect itself in earlier acceptance of treatment by those who develop malignant disease. Distrust and misunderstandings, stemming from confused and apprehensive patients, will occur with decreasing frequency, hopefully to disappear entirely. The following report is submitted to point up the above concept. It is frevently hoped that ensuing decades will record enlightenment of patients and physicians, and result in greater relief for the former, through sober, dignified, and concerted efforts of the latter.

Between 1959 and 1970, 34 cases of primary carcinoma of the tongue were treated at the University of Arkansas Medical Center. Twenty-

four patients were treated by irradiation only. Four patients were given pre-operative irradiation and one patient was given a planned post operative course of irradiation therapy. There were 5 additional patients who received radiation treatment for post surgical recurrences. This paper reports the experience at the University of Arkansas Medical Center and is intended for information and not to suggest one form of therapy in preference to another.

Twenty-seven of the patients were male and 7 female. Twenty-seven patients were caucasian and 7 patients were non-caucasian. This reflects a predominance of tongue cancer in caucasians in our experience, in so far as the population at the University Medical Center is more nearly equal between the black and white races. There were no patients below the age of 40 years. Table No. 1 gives the incidence in 10 year groups. One patient's age was not determined.

TABLE 1

Age	No. of Patients
Below 40	0
40 - 50	6
50 - 60	13
60 - 70	10
Over 70	4

Lesion size inevitably implies either a long standing or a rapidly progressing lesion. It was not possible to ascertain the exact size of the primary lesion in every patient because of differences of opinion between examiners, and in fact, in 14 cases description and measurements of the lesion were not sufficiently recorded for tabulation. Table 2 lists the sizes of the lesions that were determined.

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TABLE 2

Size of Lesion	No. of Cases
Less than 1 cm.	1
1 - 2 cm.	4
2 - 3 cm.	5
3 - 4 cm.	6
Greater than 4 cm.	4

Laterality of the lesion is of no significance; however, location is considered of great importance in treatment planning and prognosis. In this series the primary lesion was on the left in 16 cases, on the right in 12 cases, and in 6 instances laterality was not notated. The lesion was described as anterior two-thirds in 4 cases, mid-portion of the tongue in 8 cases, and posterior one-third in 15 cases. In 7 additional cases statement was not made of its location, or the lesion was of such massive size that its origin could not be determined.

The presence and extent of cervical metastases is generally accepted as being of great significance in regard to ultimate survival of the patient. Cervical nodes were reported as being present unilaterally in 12 cases, bilateral in 7 cases, and in 15 cases nodes were not present.

Staging of the neoplastic process was not performed with sufficient frequency to be of value and it is doubtful that retrospective staging is valid. At least 15 of 20 known cases were, however, of lesions larger than 2 cm., and nodes were present in 19 instances, 7 of which were bilateral. It would appear, therefore, that at least half of the cases were T_2 lesions and the node staging would range from N_1 to N_3 .

As is the usual, the histologic diagnosis was squamous carcinoma in 29 cases and in 5 cases was not reported, presumably because the biopsy had been performed at another institution. Table 3 lists the treatment administered in this series.

TABLE 3

Radiation Therapy Only	24
Pre-Operative Irradiation	4
Post-Operative Irradiation	1
Radiation for Recurrence	5
Total	<hr/> 34

Survival statistics are grim. Table 4 lists the survival in terms of months following the termination of treatment.

TABLE 4

No. of Months	No. of Patients
Less than 1 mo.	1
1 - 3 mos.	5
3 - 6 mos.	8
6 - 12 mos.	7
12 - 18 mos.	4
18 - 24 mos.	0
24 - 36 mos.	0
36 - 48 mos.	1
Greater than 48 mos.	1

Two patients were treated in 1970 and are still alive. Thus far only 2 patients have survived for longer than 48 months and in fact, excluding the 5 lost to follow-up the remaining 25 were all dead within 18 months.

Case Report # 1

VM was a 64 year old caucasian male who in 1961 was found to have a 2 x 2 x 2 cm. mass at the right base of the tongue with extension into the pharyngeal wall. Bilateral cervical nodes were present and the lesion was staged $T_2N_2M_0$. Histologically the lesion was squamous carcinoma. He was treated with Cobalt 60 irradiation, receiving 6,500 R in air to 6 x 6 cm. square, lateral opposed portals, at a 35 cm. treatment distance, such treatment having administered to the primary lesion only. The cervical nodes were not treated. A recurrence was noted at the primary site in 1964 and the patient died January 25, 1965. In retrospect, it would appear that the cervical nodes clinically present prior to treatment probably did not contain metastases.

Case Report # 2

JN was a 47 year old white male whose anterior tongue was resected in 1962. A recurrence on the residual tongue was detected in 1966 and additional resection was performed. In 1970 a recurrent nodule was found at the base of the tongue on the right side. Cobalt irradiation was administered at a 60 cm. treatment distance through lateral opposed portals 12 x 12 cm. in size. The total dose was calculated at 6,000 R in air. He was last seen July 14, 1970, at which time there was no evidence of recurrent disease in the oral cavity and no cervical nodes were present.

Five year survival rates adjusted for normal life expectancy for all stages of tongue carcinoma was reported at 28% for males and 47% for females in *Cancer Statistics for 1970* published by

the American Cancer Society, Inc. Localized disease yields a five-year survival rate of 49% and 64% for males and females respectively. Determine end results at 3 and 5 years reported from the M. D. Anderson Hospital was 52% and 45% for cancers of the oral or anterior two-thirds of the tongue. End results for base of the tongue lesions reported by the Modified Life Table method for 24 patients revealed 42.9% 3 year survivals and 37.3% five year survivals from the same institution.

Examined in retrospect this 10 year period of treatment for tongue carcinoma at the University of Arkansas Medical Center is rather grim. I believe the information reported reflects various existing factors that are not all together peculiar to our population but they unquestionably influence the end results. Analysis of the many variables is not possible. It is imperative, how-

ever, that current knowledge and techniques for treatment must be increasingly afforded to cancer victims. Perhaps the information reported herein will lead to increased efforts toward the combination of the modalities of treatment in the most effective manner for the benefit of future patients.

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ERRATUM

Dr. Charles H. Weber of Monticello co-authored the article entitled "Adrenal Hypofunction Secondary to Adrenocortical Destruction by Metastatic Carcinoma of the Lung" which appeared in the November issue of the Journal.

Prophylactic Lithium: Double-Blind Discontinuation in Manic-Depressive and Recurrent-Depressive Disorders

P. C. Baastrup et al (M. Schou, Aarhus Univ. Psychiatric Hosp, Risskov, Denmark)
Lancet 2:326-329 (Aug 15) 1970

Fifty manic-depressive patients and 34 patients with recurrent endogenous depression who had been on open lithium treatment for at least a year took part in double-blind discontinuance studies to compare lithium carbonate and placebo. Within each diagnostic group matched pairs were allocated at random to lithium carbonate or placebo. Relapses occurring first in the lithium partners constituted placebo preferences and those occurring first in the placebo partners, lithium preferences. Relapses were recorded when requiring hospital admission or supervision with additional therapy at home. Serum lithium levels were monitored. The trials terminated in significant preferences for lithium, both in manic-depressive and recurrent-depressive disorder; this happened when nine patients in each group had relapsed on placebo and none on lithium. During the whole trial, which lasted five months, 21 placebo patients relapsed but none of the lithium patients. Before the trials, patients had been on lithium for up to seven years; even after this long period there was risk of relapse on withdrawal of the drug.

Relationship of the Pulmonary Artery End-Diastolic Pressure to the Left Ventricular End-Diastolic and Mean Filling Pressures in Patients With and Without Left Ventricular Dysfunction

R. E. Falicov and L. Resnekov (905 E 59th St, Chicago 60637)
Circulation 42:65-74 (July) 1970

Relationships of the pulmonary arterial end-diastolic pressure to the left ventricular end-diastolic pressure and to the pulmonary artery "wedge" pressure were investigated in 15 normal subjects and 56 patients who had left ventricular dysfunction by cardiac catheterization. Pulmonary artery end-diastolic pressure was within 3 mm Hg of the left ventricular pressure and of the pulmonary wedge mean pressure in the normal subjects. In the patients with left ventricular dysfunction the pulmonary artery end-diastolic pressure correlated well with the pulmonary wedge mean pressure but consistently underestimated the left ventricular end-diastolic pressure. In 30 of these patients, a presystolic wave was observed in the pulmonary artery pressure tracing; it correlated well with the height of the left ventricular end-diastolic pressure, and represented the best estimate of the left ventricular end-diastolic pressure in patients with left ventricular dysfunction. It could be used to monitor left ventricular function changes in acute myocardial infarction.

Chronic Subdural Hematomas Mimic Cerebrovascular Accidents

Surinder Gupta, M.D.*, Warren C. Boop, Jr., M.D.**,
Stevenson Flanigan, M.D.***

Unusual presentation of chronic subdural hematoma is not rare. There are several instances in the literature of chronic subdural hematoma mimicking a large variety of central nervous system lesions.¹ Robinal and Schlatter,² in 1956, published in the Journal of Neurosurgery several cases of chronic subdural hematomas simulating arteriosclerotic disease or cerebrovascular insufficiency. The purpose of this presentation is to bring out some of the unusual features of chronic subdural hematomas.

At the University of Arkansas Medical Center and the Veteran's Administration Hospital during the period of 1967 to 1971, nineteen cases of chronic subdural hematomas have been treated. One feature common to most of these cases was an atypical clinical presentation. Of these the provisional diagnosis of cerebrovascular accident was most common.

An analysis of these nineteen cases is depicted in the following table.

TABLE 1

The largest number of cases were seen in the 6th decade. Two cases who were below 30 were a consequence of severe head trauma. Only 5 of these patients were noted to be alcoholics. A history of definite trauma was obtained in 10 cases.

TABLE 2

The Service to which these patients were admitted and the admitting diagnoses show the variety of clinical impressions. Cerebrovascular accident was responsible for seven of them.

TABLE 1. AGE & SEX

	19 Cases	Sex
Below 20	1	Males — 18
21 - 30	1	Females — 1
31 - 40	1	
41 - 50	3	
51 - 60	8	
61 - 70	2	
71 and over	3	

*Resident in Neurosurgery
**Associate Professor in Neurosurgery
***Professor in Neurosurgery
University of Arkansas Medical Center, Little Rock, Arkansas

TABLE 2. SERVICE TO WHICH ADMITTED AND ADMITTING DIAGNOSIS

General Surgery	— 4	GI Bleeding	— 2
		Cyst Vaginal Wall	— 1
		Hernia	— 1
General Medicine	— 4	CVA	— 3
		Headache	— 1
		CVA	— 3
Neurology	— 4	Seizures	— 2
		Subdural hematoma	— 3
		Vascular insufficiency	— 1
Neurosurgery	— 7	Subarachnoid hemorrhage	— 1
		CVA	— 1
		Head injury	— 1

TABLE 3

For twelve patients there was a history of having been confused and disoriented before they were admitted. Focal signs were seen in eight patients, but papilledema was described in only two patients. A history of headache was obtained in only seven.

TABLE 4

Spinal tap was abnormal in seven patients. Echoencephalogram was positive in one patient, ironically because it showed a shift of the midline toward the side of the subdural. Brain scan was done in 11 cases and was reported positive in five. EEG was normal in ten of fourteen instances. X-ray of the skull revealed a pineal shift in five patients. Carotid angiography was confirmatory of subdural hematomas in all the cases. Bilateral carotid studies were done in twelve cases and unilateral with cross compression were satisfactory in two cases. Tests other than skull films and angiography were not performed in all patients, and only data available in records are tabulated.

In all, 25 operations were done in these patients. Bilateral trephination was done in ten patients and unilateral trephination in five. Repeated trephination was necessary in three and craniotomy in four patients. Usually, posterior

frontal and posterior parietal burr holes were done. In half the cases temporal burr holes were also used. Postoperatively followup angiograms, and more recently serial skull X-rays in patients in whom tantalum fillings were left (Vieth 1966),³ were used for confirmation of effective treatment.

Results were excellent in eight cases, six cases are improved. Two patients are still in nursing homes. Of the three patients who died, one died of carcinoma of the liver, one month post-operatively. He had improved from the subdural hematoma. Another died with gastrointestinal hemorrhage for which he was initially admitted. The third had a severe underlying brain damage.

TABLE 3. SYMPTOMS AND SIGNS

Disorientation and confusion	— 12
Semicoma	— 2
Coma	— 2
Headache	— 7
Focal Signs	
Hemiparesis	— 6
Monoparesis	— 2
Babinski	{ bilateral — 5
	{ unilateral — 3
Nystagmus	— 2
Papilledema	— 2
Pupillary asymmetry	— 2

TABLE 4. INVESTIGATIONS

<i>Spinal Tap</i>		<i>Brain Scan</i>	
Positive	— 7	Positive	— 5
Xanthochromia	— 3	Non-specific	— 1
Elevated Protein	— 4	Negative	— 5
Elevated Pressure	— 4		
<i>EEG</i>		<i>X-ray Skull</i>	
Positive	— 5	Pineal shift	— 5
Non-specific	— 5	Negative	— 11
Negative	— 4		

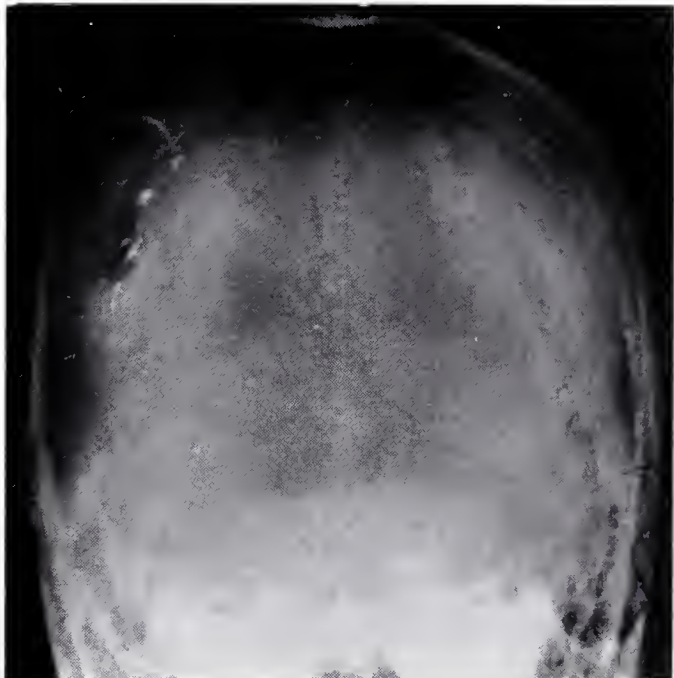
CHARACTERISTIC CASE REPORTS:

A 75 year old negro male was admitted to the Medical Service with sudden onset of left hemiplegia and coma. The patient was given a provisional diagnosis of cerebrovascular accident and conservative management was started. Brain scan done on the 7th day was reported negative. EEG was non-specific, but spinal fluid showed slightly elevated protein. The patient slowly regained consciousness and his hemiplegia improved. At the end of 3 weeks the patient was still confused and had marked weakness of his left upper extremity. Neurosurgeons were consulted and bilateral carotid angiograms followed. On the right there was a large hemispheric subdural hematoma (Fig. 1). This was drained and tantalum fillings were left on the cortical surface for followup. X-rays after 7 days revealed a residual moderately sized hematoma despite recovery of

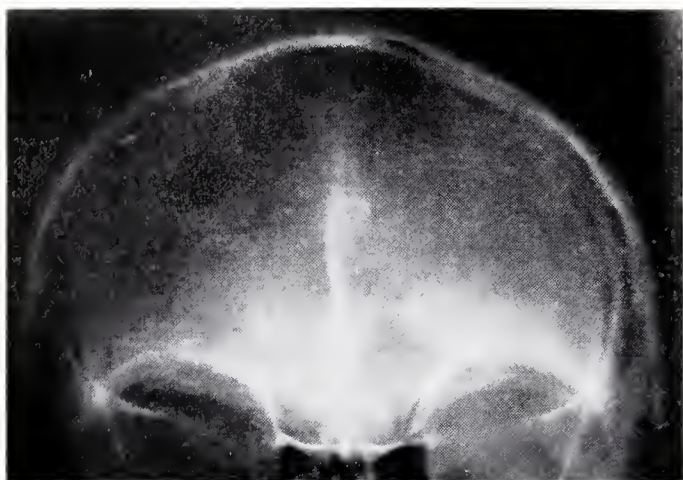


1. Right carotid arteriogram, anterior-posterior view showing displacement of the anterior cerebral artery across the midline and depression of the middle cerebral complex away from the inner table of the skull.

strength following the procedure. Retrephination was done and the hematoma was drained once again. Subsequent X-rays showed resolution (Fig. 2, a & b). This time post-operatively, the patient became hemiplegic and steroids were used for one week. The hemiparesis disappeared and he walked out of the hospital. The accentuation of the neurologic deficit was considered a consequence of sudden edema of the brain as it ex-



2a. Anterior-posterior view of the skull in the Towne projection, showing displacement of the tantalum fillings from the inner table of the skull.



2b. Subsequent followup anterior-posterior view of the skull showing approximation of the tantalum fillings left on the surface of the brain to the inner table of the skull.

panded to fill up the subdural space.⁴

Another patient, a 39 year old woman, who had headaches, was admitted to Surgery for removal of vaginal cyst. Attention to subdural hematoma was drawn by a positive survey brain scan (Fig. 3). Angiograms revealed subdural hematoma.

DISCUSSION

Only four of the 19 cases of chronic subdural hematomas were admitted to Neurosurgery with that diagnosis. The remainder were admitted to other services. The diagnosis of cerebrovascular accident was responsible for seven of these admissions. Valuable time can be lost in arriving at correct diagnosis and treatment. An average of seven days expired before neurosurgical consult was obtained. The results were poor in two



3. Anterior-posterior view of the head taken during the brain scan showing the abnormality of activity capping the right hemisphere.

patients and three others expired. When a subdural hematoma has progressed to a stage of hemiplegia, some irreversible alteration in the function to the underlying brain can be expected.

Chronic subdural hematoma can present in many different ways. There is a general tendency to label the adult patient who develops brain dysfunction as a stroke. In all such patients a history of trauma, or alcoholism, and symptoms of deranged mental state such as confusion and disorientation,⁵ in recent past should be sought. Headache will commonly have been a chronic complaint but there is often headache accompanying cerebrovascular accident. Usually, these patients have normal vital signs as compared to those with cerebrovascular accidents with which symptomatic hypertension often occurs transiently. Short of angiography there is no definite laboratory method to confirm the presence or absence of subdural hematoma. The art in diagnosing chronic subdural hematomas lies in an awareness of the fact that this can exist in the patient over 50 years of age, especially with a history of recent head trauma. The complaints of headache and confusion or disorientation are extremely significant.⁵ A differential diagnostic neurologic evaluation should be obtained as soon as possible in patients labelled as CVA.

A 20th case has since been studied who was initially discharged from the hospital, having symptomatically recovered from an apparent CVA. Two weeks later she came in comatose and had a large subdural hematoma. Recovery from the second episode of decompensation was notably slower, even with emergency operative decompression, than would likely have been obtained had earlier intervention been accomplished.

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ELECTROCARDIOGRAM

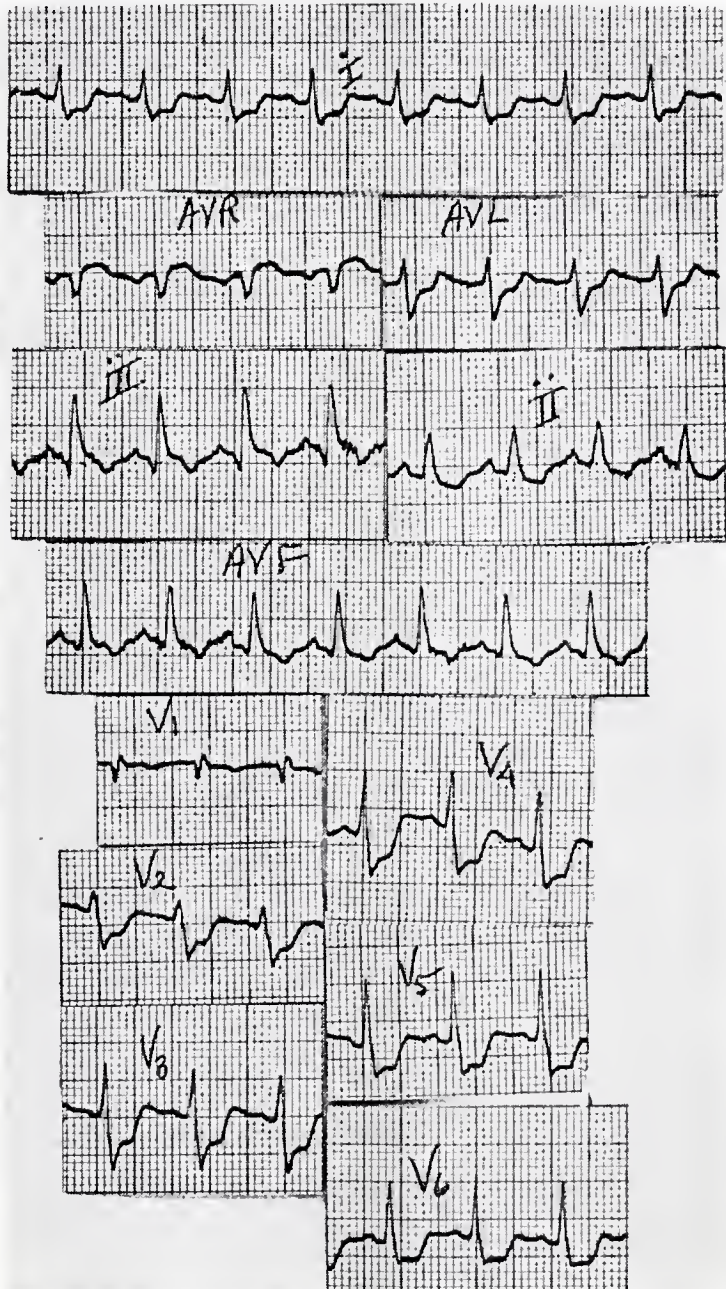
OF THE MONTH

John E. Douglas, Director Heart Station University of Arkansas Medical Center, Little Rock, Arkansas.

Question: 62 year old white female with possible carcinoma of cervix.

Acute onset of severe shortness of breath, cyanosis and shock. ECG done 2 months previous showed sinus rhythm 80/min, mean QRS of $+40^\circ$ small Q waves in II, III, and AVF, and normal St segments.

(See Answer on Page 243)



The Department of Cardiology, University of Arkansas Medical Center
J. C. Kizziar, M.D., Fellow, Cardiology



Salmonellosis

Robert T. Howell, Dr.P.H.*

Salmonellosis is a widespread infectious disease of man and animals in Arkansas and probably is one of the most important communicable disease problems in the United States today. There are an estimated two million human cases annually in the United States, although the true magnitude of the problem is not known since reporting is sporadic.¹ In Arkansas, 171 and 191 cases were reported in 1969 and 1970 respectively.

The disease is caused by one of the three species of the genus, *Salmonella*. Salmonellae are members of the Enterobacteriaceae and are characterized in the laboratory as Gram-negative bacilli that fail to ferment lactose, sucrose, salicin, and raffinose; by their ability to decarboxylate lysine, arginine, and ornithine; and their failure to produce urease, liquefy gelatin, produce indol, or utilize malonate. Further differentiation can be made on the basis of somatic and flagellar antigens.

Three major divisions of the salmonellae can be made on the basis of host preference and clinical manifestations. The first of these groups is strictly adapted to man, such as *S. typhi* and *S. enteritidis* serotypes Paratyphi A, Paratyphi C and Sendai.¹ They are not known to have secondary hosts and tend to produce the enteric fever (septicemia) type of disease typified by typhoid fever. A small inoculum can produce disease, the incubation time is prolonged and there is a tendency to produce temporary and long-term or permanent carriers.

The second group of salmonellae are those adapted to other animal hosts. Examples of this group are *S. cholerae-suis*, whose natural host is the hog and *S. enteritidis* ser Dublin, which is hosted by cattle. When man is infected by members of this group, usually a severe illness follows, with blood stream invasion, localized abscessed

and a relatively high mortality rate.

The third group, not particularly host adapted, produce disease characterized by gastroenteritis, short incubation time and usually requiring a large inoculum. The carrier state is seldom permanent, although shorter periods are not uncommon. This group can be isolated from a wide variety of wild and domestic animals, birds and insects.

Although there are over 1300 serotypes included in the unadapted group of salmonellae, most cases of disease reported, as high as 95 percent, are associated with some 25 of these serotypes. Table I gives the numbers of isolations of each serotype in the Bureau of Laboratories during fiscal years 1970 and 1971. In the United States, and world-wide, *S. enteritidis* ser Typhimurium leads the list of organisms most frequently isolated. In Arkansas, for the past two years, *S. enteritidis* ser Newport has been isolated most frequently, followed by Typhimurium.

The reservoir for salmonellae are domestic and wild animals, pets and man, both patients and convalescent carriers.² Transmission is by ingestion of the organisms in foods contaminated by the feces of man or animals such as eggs and egg products, meat and meat products and poultry, particularly when cooked lightly before consumption. Some cases may be by direct contact with an infective person or animal or by contact with surfaces contaminated by them. Contaminated water or contact with sewage may lead to infection. Many children are infected through contact with pet reptiles and amphibians, especially turtles. As widespread as the salmonellae are, found in nature, it seems unlikely that this disease can be eradicated in the foreseeable future. Improved water treatment systems and sanitary sewage and solid waste disposal systems have had their effect on the prevalence of typhoid and

*Director, Bureau of Laboratories, Arkansas State Department of Health, Little Rock, Arkansas 72201

paratyphoid fevers; that plus an effective carrier surveillance system has reduced those diseases considerably. Control of the unadapted (gastroenteritis) salmonellae must be through persistent improvements and efforts in 1) elimination of reservoirs of infection in man, his pets and domestic animals, 2) protection of the food cycles of man and his animals and 3) constant epidemiological surveillance of cases and carriers of the infection.

The National Conference on Food Protection held in Denver, Colorado last April examined many of the approaches necessary for the protection of the food supply against *Salmonella* and

TABLE I. FREQUENCY OF ISOLATION OF SALMONELLEAE SPECIES AND SEROTYPES AT THE BUREAU OF LABORATORIES DURING FISCAL YEARS 1970 AND 1971

<i>Salmonella</i> Isolated	FY 1970	FY 1971
<i>Salmonella typhi</i>	15	40
<i>Salmonella cholerae-suis</i>	0	0
<i>Salmonella enteritidis</i> ser		
Newport	56	64
Typhimurium	23	50
Javiana	13	26
Oranienburg	5	3
Heidelberg	8	8
Infantis	3	16
Montevideo	1	1
Norwich	3	2
Saint Paul	3	0
Thompson	4	2
Bredeney	2	0
Christiansborg	1	0
Bareilly	1	5
Enteritidis	3	6
Ibadan	2	4
Minnesota	2	0
Java	4	4
Drypool	1	0
Senftenberg	0	1
Blockley	0	13
Muenchen	0	2
Jamaica	0	1
Rubislaw	0	5
Panama	0	3
Clabornei	0	1
Poona	0	1
Newington	0	1
Anatum	0	1
Cubana	0	2
Berta	0	3
Derby	0	1
Duesseldorf	0	2
Binza	0	1
Georgia	0	1
Typhimurium var		
Copenhagen	0	4
	—	—
	150	274

other organisms. Some of these included the institution of practices to control the contamination and development of the salmonellae in raw agricultural and marine products; control of contamination during the manufacture of processed foods and prevention of contamination of foods in commercial and institutional food service operations. Likewise, there must be consumer education to instill the proper handling of foods in the home by the housewife or ultimate consumer. The public needs to give its support to regulatory activities of national, state and local food protection programs. Government and industrial surveillance programs could be enlarged, and there should be more research into the nature of the organisms and the disease to find further ways to bring it under control, to evaluate control efforts, and to improve food handling methods.

Adequate diagnosis by clinical observation alone is seldom possible. Confirmation by laboratory isolation and identification of the infective organisms is desirable. Bacterial agglutination tests for typhoid and paratyphoid (Widal Test) may be useful for a tentative diagnosis but are significant only at titres of 1:160 or above, and should be confirmed by isolation of the organism from a feces or urine culture. The agglutination tests are seldom of value in gastroenteritis-type disease since there is no time for development of antibodies, and due to the 1300 plus serotypes.

The best specimen for laboratory isolation and diagnosis is a fresh or properly preserved stool specimen taken before treatment. In febrile disease, a blood culture may be quite useful. Identification of serotypes of *Salmonella* and phage-types of *S. typhi* is an important epidemiological tool in the Health Department's efforts to control salmonellosis and should be performed on isolates from each case. If a laboratory does not have the facilities to perform these, an isolate should be forwarded to the Bureau of Laboratories, Arkansas State Department of Health, so that this identification can be made. Good surveillance and control requires that all cases of salmonellosis be reported to the Local or State Health Department.

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EDITORIAL

Part II Malpractice and Equity — An Urgent Problem

Alfred Kahn, Jr., M.D.

Sober reflection on the spate of malpractice suits in America is bound to indicate a breakdown in the health care delivery or the usual regard for equity and fair play repeatedly manifested in our legal system.

The salient point is that an airing of a patient's complaints against his physician should not result in damage to either party above and beyond the scope of the case at hand.

This leads to the first point. When a patient is displeased with his physician and initiates a suit against the physician, this suit is known as malpractice. The legal denotation of malpractice to jurists may be perfectly clear, but the connotation to the lay public is equally clear—a horrendous misdeed committed by a physician. The problem is further distorted by the peculiar position of physicians in our society; a physician is considered to be a learned man in a very distinguished profession. Thus when a physician is accused by a patient if the expression malpractice is used, the physician suffers irreparable damage whether the complaints are valid or not. In short, the association of a physician's name with the expression malpractice is an injury which has no counterpart in any other profession. It is particularly grievous in the cases in which the plaintiff's complaints are not sustained by the court. Here the physician has sustained a serious injury for which there is no relief or cure.

All of this leads to a second point which is how can a patient get redress without exacting a punishment over and above what is fair and equitable. The real core of the problem is twofold: the connotation of the word malpractice and the widespread publicity these cases receive. If the

physician were sued and the expression malpractice was deleted, it would occasion much less attention — perhaps virtually none. There is probably some word or phrase that would describe these cases and not connote intentional wrong doing on the physician's part; such cases might be called, "Delivery of Medical Care Suit"; this implies dissatisfaction without the pre-judged meaning of the word malpractice. The second big problem is how can a patient seek redress and get it, if justified, without destroying the physician's greatest asset, his professional standing; adverse publicity destroys professional stature. If the physician's reputation is to be protected, then adverse publicity has to be stopped at its source. Probably, this implies that there has to be a resolution of the problem out of conventional courts by a group consisting of the defendant physician and his representatives, the plaintiff and his representatives, the insurer of the physician and his representatives, and an impartial disinterested party preferably an attorney or judge. This group should have enough authority to enforce a decision. There are many commissions in the government which perform analogous duties; there are utility commissions, transportation commissions, etc., etc, with rather formidable power in some instances.

A third point in this context of physician-patient contention is—if a commission is set up that would arbitrate and rule on major grievances should there be a limit of recovery as in Workman Compensation Cases. In return for making a commission services readily available, should not the plaintiff's range of monetary recovery be scaled down so that professional li-

ability can be obtained more freely and economically.

Fourthly, and of great importance is the matter of finance. An interesting question here is — should each patient and each physician be charged a small percentage above the usual fee (but proportional to the fee) as “Professional-Patient Insurance”. This fee could establish a pool of money to operate the commission or, better still, the fees could be pooled and used to insure the physicians and patients of that component medical society. The problem here is that this system might seem to invite contention between the physician and the patient.

In most facets of life there seems to be feedback phenomena. When physicians were a poorly paid group, as in the last century, law suits

against physicians were infrequent. Currently, physicians are prosperous and their financial success makes them an inviting target for law suits. If these lawsuits against physicians continue to increase, it will eventually result in the destruction of the physician's position in society, which in turn will lead to fewer young men entering medicine; there will then be a strong impetus to socialize medicine to fill the gap in the delivery of medical care.

The thrust of the foregoing indicates the severe, disproportionate damage to the physician when he is rightfully or wrongfully brought to the bar of justice by a patient. This is not equity in the legal sense and if the accelerating pace of malpractice suits continue, it is going to destroy private practice as the vehicle of delivery of medical care.



OBITUARY

Dr. Robert H. Manley

Dr. Robert H. Manley died November 13, 1971, at the age of 59. He was born in Russellville, but had lived most of his life in Clarksville, where he had practiced since 1951.

Dr. Manley was graduated from the University of Oklahoma in Norman, Oklahoma, and the University of Arkansas School of Medicine in Little Rock. He interned at the Hillcrest Medical Center in Tulsa, Oklahoma. Dr. Manley received post-doctoral training in Cardiology at Scripps Clinic and Foundation at La Jolla, California.

He was a member of Johnson County Medical Society, Arkansas Medical Society, the American Medical Association, American Geriatrics Society, and was a Fellow in the American College of Cardiology. Dr. Manley was a staff member at the Clarksville Hospital and St. Mary's Hospital in Russellville. He was a member of the First United Methodist Church.

Dr. Manley is survived by his wife, Mrs. Mary Banasky Manley, and a daughter, Mrs. Donna Wolfe.

THINGS



TO

COME

Postgraduate Course in Pediatrics to Be Held

The 21st Annual Postgraduate Course in Pediatrics of the University of Texas Medical Branch will be held in Galveston, Texas, on March 16 and 17, 1972. The course will emphasize “Pediatric Emergencies” or “Crisis Management.” Guest lecturers will be Norbert B. Enzer, M.D.; Richard C. Behrman, M.D., and C. Henry Kempe, M.D. The program is acceptable for twelve prescribed hours by the American Academy of Family Practice. Registration fee will be \$75. For further information write:

L. H. Lockhart, M.D., Chairman
Pediatric Postgraduate Committee
University of Texas Medical Branch
Galveston, Texas 77550

Emergency Health Services Conference

The Fourth Annual Emergency Health Services Conference will be held in Little Rock on September 15 and 16, 1972. The Conference will serve as the annual section meeting of Section VI of the American College of Surgeons.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The long awaited public hearings on the various proposals for national health insurance before the House Ways and Means Committee are now underway. Some 200 organizations and individuals are expected to testify during the scheduled six weeks of hearings.

Lead off witness was HEW Secretary Elliot Richardson who revealed an entirely new proposal "to tighten controls on provider costs and inefficiencies".

The Secretary also outlined the long-awaited program for regulating private health insurance companies. In the 38-page statement, Richardson was highly critical of the Kennedy Labor Bill.

Richardson said the provider controls and the insurance company plan will be submitted in legislative detail to the committee shortly.

Following is a summary of the Administration's text on the provider plan:

"In order to help the consumer become a prudent buyer in the medical care market and to protect the consumer against unnecessary increases in health care costs, we shall propose the following provisions:"

... The states shall require health insurance companies to inform prospective policyholders as to benefits, exclusions, premium costs and delivery system choices.

... The states shall require providers to inform the public as to charges for standard items and other patient access matters.

... We will establish on an experimental basis local quality review organizations composed of outside medical experts, including non-providers in some instances.

... We also propose to require NHISA carriers to apply control measures and statistical reporting measures in accordance with Federal guidelines, such as strict review of utilization of health care services. Specific plans for implementation with regard to wages and prices will be developed in conjunction with the Committee on the Health Industry established by the President under Phase II of his new economic policy.

... State planning agencies will be required in cooperation with area-wide planning agencies and as a condition of Federal grant support and approval, to identify geographic areas of physician and facility oversupply. States are to develop and apply detailed criteria based on Federal guidelines, and publish this information.

Under the proposed insurance company regulations, Richardson said:

"We intend to secure agreements with states under which the states will

... Require annual, independent audits of participating insurance companies.

... Create state health insurance insolvency mechanisms. A Federal mechanism will also be established for use if a state fails to act satisfactorily.

... "File and use" procedures for premium rates NHISA insurance contracts, with authority to disapprove extraordinary rates.

... Require disclosure by insurers of their administrative expenses as a percentage of premiums.

... Create state insurance pools, on a state-wide or sub-state basis open to small employers, the self-employed, and those who are not employed, but are ineligible for Federally-financed health programs."

Richardson said he was certain the hearings "will culminate in a national health insurance program." The Administration's plan avoids the danger of two extremes—proposals that do little to alter the present system and proposals to substitute a monolithic Federal scheme, he declared. Richardson said proponents of the Kennedy-Labor Bill "seem to assume that radical intervention by the Federal Government in health care, in an inflexible, predetermined and monolithic manner, is the only way to solve health organization and delivery problems. I suggest that we are more likely to attain our common health objectives by stimulating competition and by promoting consumer education and freedom of individual choice, rather than by resorting to fiscal coercion and unrealistically global

schemes." He estimated it will cost \$60 billion in new taxes.

The American Medical Association's Mediscredit and the Health Insurance Association of America's plan also were criticized. The major shortcoming in both, said Richardson, "is the great unlikelihood of achieving universality in protection."

The catastrophic protection plans, standing alone, "do very little for very few people—far less than what this nation must do if it is to act with a full sense of responsibility," the HEW Secretary testified.

Mills opened the hearings by noting that health providers are beset by many problems. High quality care is available but unevenly distributed, he said, and costs are rising; there is lack of planning; the nation depends on importing foreign graduates; and consumers often find care difficult to get.

With the Administration's testimony in hand, the Committee then turned to the long parade of witnesses from such diverse organizations as the College Democratic Clubs of America to the Senior Citizens Golden Ring Council to ascertain how they think the nation's health care system should be reshaped.

AFL-CIO President Meany told Committee members that "Labor will vigorously oppose" any efforts to dilute its plan for national health insurance.

"I hope and firmly believe that we won't have to come back in the next Congress," Meany said. "But, if we have to, we will come back again and again until the Health Security Program is enacted. And, if we have to, we will take this issue to the people in the elections of 1972."

Meany blasted the national health insurance proposals of the Administration, the health insurance industry, and the AMA—saying they "would all just pour new money into the present health care delivery system which is a failure."

He said that AMA's Mediscredit "represents a major shift in direction for organized medicine . . . but it is little more than a continuation of the present unsatisfactory system of delivering health care.

Meany scoffed at warnings that physicians might rebel if the labor bill is enacted. "The vast majority of doctors are dedicated, proud professionals whose basic concern is for the sick and ailing."

Committee member Hugh L. Carey (D., N.Y.), told the labor witnesses when the committee meets in executive session it must face the fiscal considerations involved and try to develop a measure that fits within some dollar figure. He asked whether labor would be willing to make a choice between comprehensive coverage for part of the population or basic coverage for all. A labor witness replied to the effect labor does not want to make such a choice now. "We will cross that bridge when we get to it."

The American Farm Bureau Federation urged caution against the creation of "a powerful bureaucracy of great scope" and the National Federation of Independent Business came out flatly against any compulsory insurance system.

The American Public Health Association called for a broad national program with heavy emphasis on speeding development of pre-paid group plans. The goals set forth by James Kimmey, APHA Executive Director, fit the labor bill more than any other proposal, but the association did not endorse a single measure.

Equitable Life Assurance Society President, J. Henry Smith, accompanied by Daniel Pettengill and Ardell T. Everett, presented the combined statement of the Health Insurance Association of America, American Life Convention, Life Insurance Association of America, and Life Insurers Conference.

Smith urged enactment of "The National Health Care Act of 1971" the insurance companies' plan under which federal standards would be set for insurance coverage, personal and corporate income tax incentives would encourage participation, and federal-state subsidies would finance coverage for the indigent and medically indigent as well as uninsurable persons with sliding scale contributions for premiums.

Comprehensive health insurance should be available to all, Smith said. "This can best be achieved at lowest cost and most rapidly by expanding the scope of existing health insurance plans . . . for those without resources, governmental subsidies are required."

"The choice between a pluralistic private insuring mechanism and a monolithic federal one is a fundamental choice that must be made before any national health insurance plan can be adopted. We think our record of accomplishments is good and our potential is great."

Replying to charges private companies have

failed to stem rising costs, Smith said the principal causes have been rising wages, more costly equipment and expensive new life-saving techniques. He asked whether insurers were supposed to prevent these developments.

Furthermore, the witness said, "insurers have tried hard to spot and control overcharging. We have worked with medical societies to set up peer review committees, not just for the purpose of educating physicians not to overcharge in the first place."

The National Association of Insurance Commissioners urged preservation and expansion of the existing system of private health insurance and recommended utilization of the state insurance regulatory mechanism rather than a new federal one.

"The abandonment of the extensive system of private health insurance in favor of an all government program would reject decades of expanding and improving an on-going system and would cause severe dislocation in both state and federal revenues," said Russell van Hooser, Insurance Commissioner of Michigan.

The International Association of Health Underwriters "whole-heartedly" supported the Private Insurance Company Bill.

The American Dental Association said any National Health Program should start out with a dental component that concentrates on preventive services for children. Any program approved should include dental benefits. The same stand was taken by the American Society of Oral Surgeons.

Leonard Woodcock, President of the United Auto Workers Union, told the Committee "it is time to cancel the insurance industry" and impose a national health insurance program operated by the government.

Woodcock opposed the Administration's proposal to require employers to provide employees with health insurance from private firms, saying organized labor helped to create the private health insurance industry, and supported it for three decades.

"But the private health insurance industry has failed," Woodcock said. "It has failed to control costs. It has failed to provide adequate benefits even for those with some form of coverage. After 30 years of effort, all private health insurance combined still covers only a little more than one-third of private personal health care

expenses.

Woodcock said the Nixon plan would not regulate the insurance industry although it would require purchase of \$30 billion of private insurance.

"It is time to cancel an insurance industry that places a premium on sickness rather than health and that puts the interests of consumers last in line," Woodcock said.

Pharmacists represented by the American Pharmaceutical Association urged the Committee to include drugs in any health insurance plan. The Committee is not expected to act on health insurance legislation until next year.

William G. Battaile, President of the American Association of Blood Banks, asked that no coverage be provided to pay for blood transfusions. He contended that payments would encourage greater use of commercial blood banks and increase the risk of hepatitis.

At the end of the second week Ways and Means Chairman Wilbur Mills had attended only one of the hearings and other committee members seemed to be platooning themselves in the arduous task of listening to the opinions of so many diverse organizations and individuals.

Expected to be signed into law shortly, is health manpower legislation that will authorize an estimated 2.9 billion dollars in aid to health profession students and their schools in the next three years—and provide the facilities and programs to close the manpower shortages in the health professions within seven years.

Medical schools would receive 11,500 dollars for the full-term cost of training each student. Each school would receive 2,500 dollars per student per year for the first three years of training. The grant rises to 4,000 dollars for the year of graduation. In order to encourage swifter training, three year schools would receive 13,500 dollars based on 2,500 dollars for each of the first two years and 8,500 dollars for the third year.

Each school would be required to enroll an additional five per cent of students, or five students . . . whichever is the greater . . . to qualify for assistance. An extra \$1,000 a year would be awarded schools for each student exceeding this total. The legislation will also help establish at least five new medical colleges.

Additional authorizations would provide 270 million dollars for health manpower education initiative awards to alleviate manpower shortages

and to train new types of personnel, and 412 million dollars for special project grants for programs in family medicine, physician assistant training, and others. The bill continues support for scholarship and student loans at increased levels as has been provided heretofore in the Health Professions Educational Assistance Act.

House opposition to a Senate-passed cancer bill that would tend to fragment the National Institutes of Health has touched off a debate in Washington as to how best to organize a multi-million dollar campaign to conquer the disease. The American Cancer Society has sponsored a number of full-page ads about the nation calling for popular support of the "put-a-man-on-the-moon" approach to the conquest of cancer as contained in the Senate bill.

Florida's Congressman Paul Rogers, chairman of the House Interstate and Foreign Commerce Subcommittee on health, and himself the author of a "cancer attack" bill that would beef-up cancer research but keep it within the framework of NIH, immediately branded the Cancer Society ads as "an attempt to bring the issue of finding a cure for cancer into a political setting."

It is reported here that the Cancer Society ads are just the opening salvo in a "big money" grass roots campaign to pressure the Congress into passage of the Kennedy-Administration backed "Conquest of Cancer" bill. A month ago the

AMA's testimony on this bill challenged the wisdom of separating cancer research from the mainstream of bio-medical research now carried on by the NIH.

President Nixon formally established a committee on the health services industry to furnish advice on ways to keep health costs from climbing too rapidly. In an executive order, the chief executive said the committee—which is expected to consist of about 15 members—"shall provide advice concerning special considerations that tend to contribute to inflation in the health services industry."

Members of the advisory panel, due to be named shortly, shall be generally representative of medical professions and related occupations, hospitals, the insurance industry, other supporting industries, consumer interests and the public, according to the presidential order.

Health care was singled out by the Administration for special consideration in the Phase Two Program of wage-price controls that will be administered by a cost of living council to which the health advisory group will report.

The extent to which the program will affect the medical profession and details of how it will work and what guidelines and/or controls may be promulgated have not been disclosed. However, a White House background paper spoke of "voluntary cooperation."



Epidemiological Studies of *Pseudomonas* Species in Patients With Leukemia

G. P. Bodey (M. D. Anderson Hosp, Houston 77025)

Amer J Med Sci 260:82-89 (Aug) 1970

The frequency of *Pseudomonas* species in the stools and throats of 87 patients with leukemia was determined; 25% of the patients were carriers on admission to hospital, and a total of 54% of the patients became carriers. The majority of patients who acquired *Pseudomonas* sp while in the hospital did so during the first four weeks. Twenty-eight carriers received antipseudomonal antibiotics parenterally, which eliminated the organism from the stool or throat of 32%. The frequency of *Pseudomonas* sp infections was 26% in the carriers compared to 13% in the non-car-

riers. In the majority of infections occurring in carriers, the same pyocine type of *Pseudomonas* sp was found at the site of infection or in the stool or throat swab specimens.

ANSWER—Electrocardiogram of the Month

This ECG shows a supra-ventricular tachycardia @ 140/min, a mean QRS of + 90° or more with extreme ST segment depression of 3-4/mm in V2-6. These changes reflect left ventricular ischemia, and because of their presence in the anterior precordial leads, also RV ischemia. These findings coupled with the appearance of a marked rightward shift in the mean QRS axis is very suggestive of acute cor pulmonale. Although severe acute respiratory failure in a patient with chronic lung disease may produce this picture, acute massive pulmonary emboli is a more common cause.

"A dynamic electrocardiographic concept useful in the diagnosis of cor pulmonale" Kilcayne et al. *Circulation* V.42 p 903



PERSONAL AND NEWS ITEMS

Lincoln County Again First

The Lincoln County Medical Society was again the first county society to submit its 1972 dues report to the Society's headquarters office. Lincoln County has held this distinction for the past several years. Dr. James W. Freeland is president of the society and Dr. R. C. Petty is secretary.

Dr. E. D. McKnight Honored

In celebration of his ninetieth birthday, Dr. E. D. McKnight of Brinkley was given a party in his office in early November. At the party, Dr. McKnight was presented with a plaque from the Bank of Brinkley for his long years of service as a member of the Board of Directors.

Dr. Saltzman Rotary Club Speaker

Dr. Ben N. Saltzman of Mountain Home was the guest speaker at the Stuttgart Rotary Club's Golden Anniversary program which was held in November. Dr. Saltzman is a past director of Rotary International.

Physician and Wife Head Planning for Ball

Dr. and Mrs. Deno Pappas have been named to head the planning for the Hot Springs Eighth Annual Beaux Arts Ball to be held February 12th. The Ball, which annually attracts approximately 400, is given to raise funds for the Fine Arts Center in Hot Springs.

AMA President Visits Fort Smith

The president of the American Medical Association, Dr. Wesley Hall, attended the dedication ceremonies of Sparks Regional Medical Center's new west wing. In addition to Dr. Hall, Dr. Stanley Applegate of Springdale, president of the Arkansas Medical Society, and many national, State, and local dignitaries attended the ceremonies which were held December 12th.

RMP Consultant Visits Lake Village

Dr. Clyde Tracy of Pine Bluff met with physicians in the Lake Village area in early December. Dr. Tracy is one of the consultants in the Continuing Education Program for Physicians, a project of the Medical Center funded by the Arkansas Regional Medical Program.

Dr. Prewitt Is Guest Speaker

Dr. Taylor Prewitt was the guest speaker at the December 13th meeting of the Family Practice Agency in Fort Smith. Dr. Prewitt spoke on "Aging."

Second Annual James S. Taylor Lecture Presented

The Second Annual James S. Taylor Lecture was presented at the University of Arkansas Medical Center by Dr. Bernard Lown, Director of the Cardiovascular Research Laboratory at the Harvard School of Public Health and Director of the Samuel A. Levine Coronary Care Unit in the Peter Bent Brigham Hospital in Boston. His topic was "New Approaches to Sudden Coronary Death." The James S. Taylor Lecture was established by the Arkansas Heart Association to honor Dr. James S. Taylor of Little Rock, Professor Emeritus of the University of Arkansas Medical Center and a past president of the Arkansas Heart Association.

Physicians Attend Meeting

Dr. Stanley Applegate of Springdale, president of the Arkansas Medical Society, and Dr. Morris Henry of Fayetteville, State Senator, were guests of the Pulaski County Medical Society at its meeting on December 7th.

Dr. Herron Relocates

Dr. J. T. Herron, formerly of Little Rock, assumed the duties of Health Officer of Marion County (Salem), Oregon, earlier this month. Before moving to Oregon, Dr. Herron had worked in the Arkansas State Department of Health for nearly 32 years, serving as District Health Officer at Hamburg and Helena for four years, Assistant State Health Officer for seven and one-half years, and State Health Officer for the past twenty years.

Dr. Streeten Guest Speaker at UAMC

Dr. David Streeten, Professor of Medicine at the University of Syracuse, presented two lectures at the University of Arkansas Medical Center on December 9th. Dr. Streeten's topics were "Cushing's Syndrome" and "Regulation of Salt and Water Metabolism."

Dr. Anderson Honored

A resolution honoring Dr. P. R. Anderson of Arkadelphia was adopted by the Paramedical Personnel of Arkadelphia. The resolution expresses respect and admiration for Dr. Anderson as a citizen, friend, and physician with the highest standards of ethics.

Charter Diplomates of the American Board of Family Practice

The following Arkansas physicians have been named Charter Diplomates of the American Board of Family Practice:

Dr. John E. Alexander, Magnolia
 Dr. C. Rodney Baker, Fayetteville
 Dr. Bob Banister, Conway
 Dr. Curtis B. Clark, Sheridan
 Dr. John W. Dorman, Springdale
 Dr. Hillard R. Duckworth, Piggott
 Dr. Robert A. Etherington, Eureka Springs
 Dr. Julian L. Foster, Little Rock
 Dr. David L. Gibbons, Ozark
 Dr. A. Meryl Grasse, Calico Rock
 Dr. James B. Holders, Jr., Little Rock
 Dr. C. Lewis Hyatt, Monticello
 Dr. John K. Kagy, Little Rock
 Dr. Walter H. Lane, Jr., Dover
 Dr. Albert W. Lazenby, Dumas
 Dr. H. D. Luck, Arkadelphia
 Dr. Jim E. Lytle, Batesville
 Dr. James M. Robinette, Jonesboro
 Dr. Guy U. Robinson, Dumas
 Dr. Ben N. Saltzman, Mountain Home
 Dr. Jack M. Sheppard, El Dorado
 Dr. John M. Tudor, Jr., Little Rock
 Dr. John W. Vinzant, Fayetteville
 Dr. George W. Warren, Smackover
 Dr. Donald D. Weaver, Gentry
 Dr. Robert H. Weaver, Gentry
 Dr. James R. Weber, Jacksonville
 Dr. William M. Wells, Heber Springs
 Dr. Tom D. Whiting, Springdale
 Dr. Thomas H. Wortham, Jacksonville

Physicians Re-elected to AAFP Membership

The following physicians have been re-elected to active membership in the American Academy of Family Physicians:

Dr. Ted E. Ashcraft, Russellville
 Dr. Eugene H. Ball, Blytheville
 Dr. John D. Clower, Rogers
 Dr. John W. Dorman, Springdale
 Dr. David E. Ducker, Salem

Dr. C. Randolph Ellis, Malvern
 Dr. R. A. Etherington, Eureka Springs
 Dr. A. J. Forestiere, Harrisburg
 Dr. Lowell O. Harris, Hope
 Dr. Wayne Lazenby, Dumas
 Dr. Mahlon O. Maris, Harrison
 Dr. R. H. Nunnally, Gurdon
 Dr. Merrill J. Osborne, Blytheville
 Dr. Gene D. Ring, Dardanelle
 Dr. Joseph S. Robinette, Pine Bluff
 Dr. Wallis A. Ross, Arkadelphia
 Dr. Jack M. Sheppard, El Dorado
 Dr. Bob G. Smith, Batesville
 Dr. Charles H. Stinnett, Siloam Springs
 Dr. Charles G. Swingle, Marked Tree
 Dr. Chaney W. Taylor, Batesville



PROCEEDINGS OF SOCIETIES

County Societies Announce New Officers

Baxter County Medical Society's officers for 1971 were re-elected to serve in 1972. They are: Dr. John Sneed, president; Dr. Doyle Kinder, vice president; Dr. Ben N. Saltzman, secretary; Dr. Jack Wilson, delegate to the Arkansas Medical Society; and Dr. John F. Guenther, alternate delegate.

Pulaski County Medical Society's officers for 1972 have been named. Dr. G. Thomas Jansen will serve as president; Dr. Amail Chudy, vice president; Dr. Frank Padberg, secretary; and Dr. Curry Bradburn, treasurer. Dr. Winston K. Shorey was named president-elect to serve in 1973.



NEW MEMBERS

Dr. Vollie Earl Parsons, Jr.

Dr. Earl Parsons, Jr., is a new member of the Hot Spring County Medical Society. He is a native of Arkadelphia.

Dr. Parsons graduated from the University of Arkansas School of Medicine in 1943. He completed his internship at St. Elizabeth Hospital in Washington, D. C., and a Fellowship at the Institute of Living in Hartford, Connecticut. From 1950 to 1960, Dr. Parsons practiced in Little Rock. He then moved to Burlington, Iowa, where he practiced for eight years. From 1968 to August, 1971, Dr. Parsons served as Chief of Psychiatric Service at the Federal Correctional Institute at Tallahassee, Florida. He also served as Associate Professor at the Florida State University School of Law. Dr. Parsons is a Fellow in the American Psychiatric Association and the American College of Legal Medicine.

Dr. Parsons' office for the practice of Neuropsychiatry is located at 1234 South Main Street in Malvern.

Dr. Walker Douglas Goodin

Dr. Walker D. Goodin, a native of Indianapolis, Indiana, is a new member of Phillips County Medical Society.

Dr. Goodin was graduated from the DePauw University in Greencastle, Indiana, in 1958. He then attended Indiana University School of Medicine in Indianapolis, from which he was graduated in 1962. Dr. Goodin completed his internship at the Bernalillo County Medical Center in Albuquerque, New Mexico. From 1963 to 1966, he practiced at the Dickinson Clinic in DeQueen, Arkansas. In 1967, Dr. Goodin began a residency in Psychiatry at the Louisville Veterans Administration Hospital. The second and third year of his residency were completed at the University of Arkansas Medical Center.

Dr. Goodin is in the practice of Psychiatry at

the East Arkansas Regional Mental Health Center Building in Helena.

Dr. Jerry Rowland Stewart

The Sebastian County Medical Society announces that Dr. Jerry R. Stewart has been accepted for membership. He was born in Benton, Arkansas.

Dr. Stewart was graduated from Ouachita Baptist College, Arkadelphia, Arkansas, and from Baylor University, Waco, Texas. In 1964, he was graduated from the University of Arkansas School of Medicine. His internship was completed at the City of Memphis Hospitals, University of Tennessee, Memphis, Tennessee. His residency work in Internal Medicine was also completed at the City of Memphis Hospitals. Following completion of his residency in 1967, he was a Fellow in Chest Medicine at the West Tennessee Chest Disease Hospital in Memphis. Dr. Stewart served in the United States Army at Martin Army Hospital, Fort Benning, Georgia, from 1968-1970. He is a member of the American Thoracic Society.

Dr. Stewart is affiliated with the Cooper Clinic in Fort Smith, where he specializes in Internal Medicine and Pulmonary Diseases.

Pulaski County Medical Society announces the recent addition of the following new members to its membership roll:

Dr. Jock S. Cobb

Dr. Cobb was born in Hot Springs, Arkansas. He was graduated from Hendrix College in Conway, Arkansas, in 1966, and in 1970, he was graduated from the University of Arkansas School of Medicine. Dr. Cobb's internship was completed at Arkansas Baptist Medical Center.

He is in the General Practice of Medicine at the North Hills Family Clinic in Sherwood.

Dr. Rex Marion Easter

Dr. Easter is a native of Gurdon, Arkansas. He was graduated from Henderson State College in Arkadelphia, Arkansas, and the University of Arkansas School of Medicine in 1960 and 1964, respectively. Dr. Easter interned at the Confederate Memorial Medical Center in Shreveport, Louisiana, and also completed a residency in Orthopedic Surgery there.

His office is at 601 North University in Little Rock, where he is in the practice of Orthopedic Surgery.

Dr. Donald Anthony Laurenzana

Dr. Laurenzana was born in Chicago. He attended the University of Arkansas in Fayetteville, graduating in 1965, and the University of Arkansas School of Medicine, graduating in 1970. His internship was completed at the Baptist Medical Center.

Dr. Laurenzana's office for the practice of General Medicine is located in the North Hills Family Clinic in Sherwood.

Dr. R. Joe Cannon

Dr. Cannon is a native of Tulsa, Oklahoma. He attended Northeastern State College in Tahlequah, Oklahoma, and was graduated from Tulane University School of Medicine in New Orleans in 1965. Dr. Cannon interned at the McLeod Infirmary in Florence, South Carolina. A residency in Ophthalmology was completed by him at the Indiana University Hospitals in Indianapolis.

Dr. Cannon's office is at 516 Scott Street, Little Rock, where he specializes in Ophthalmology.

Dr. Donald Max Raney

Dr. Raney was born in Fordyce, Arkansas. He attended Arkansas A. & M. College and Little Rock University. In 1970, he was graduated from the University of Arkansas School of Medicine. Dr. Raney's internship was served at the Arkansas Baptist Medical Center.

He is now in the General Practice of medicine at 813 Marshall Road, Jacksonville.

The following interns and residents are also new members of the Pulaski County Medical Society:

University of Arkansas Medical Center:

Steven A. Davie, Resident—Surgery
 Jan W. Duncan, Resident—Orthopedics
 Wilbur M. Giles, Resident—Neurosurgery
 Donald E. McMillan, Resident—Radiology
 James R. McNair, Resident—Ophthalmology
 Nirmal K. Pal, Resident—Obstetrics/Gynecology
 J. Mayne Parker, Resident—Ophthalmology
 Larkus H. Pesnell, Resident—Pathology
 James R. Phillips, Fellow—Pulmonary Disease
 Nancy F. Rector, Resident—Internal Medicine
 Earl B. Riddick, Jr., Resident—Radiology
 Charles F. Safley, Jr., Resident—Dermatology
 Juan Sanchez-Humala, Resident—
 Ophthalmology
 George T. Schroeder, Resident—Ophthalmology
 Louis G. Singleton, Intern—Pathology
 Marolyn N. Speer, Resident—Radiology
 James Y. Suen, Resident—Ear, Nose and Throat
 Daniel J. Suiter, Intern—Internal Medicine
 Herman A. Talley, II, Intern—Obstetrics/
 Gynecology

St. Vincent Infirmary:

Robert J. McGowan, Jr., Intern

Veterans Administration Hospital, Little Rock:

Neil D. B. deSoyza, Resident—Cardiology



Lung Scintigraphy and Pulmonary Function Studies in Obstructive Airways Disease

T. Isawa, K. Wasserman, and G. V. Taplin
 (Harbor General Hosp, Torrance, Calif 90510)
Amer Rev Resp Dis 102:161-172 (Aug) 1970

Eleven normal volunteers and 65 respiratory disease patients were studied by a battery of lung function tests, chest roentgenograms, and three types of lung scintigraphy — radio-aerosol and xenon 133 gas inhalation and perfusion lung scan procedures. Aerosol inhalation scans in normal volunteers showed uniform aerosol distribution patterns nearly identical to their perfusion counterparts. All patients with airway obstruction showed abnormal aerosol scans.

There were two distinctly abnormal configurations in aerosol distribution—central, peripheral, and combinations of each. The central and peripheral patterns correspond with the emphysematous and bronchitic categories, respectively, described by Burrows et al. The aerosol inhalation scan as a sensitive indicator of airway obstruction is a useful counterpart to the perfusion scan and helps distinguish emphysematous, bronchitic, and mixed types of obstructive airway disease. It discloses the location and magnitude of the bronchitic components and can be helpful in determining response to treatment. Performed sequentially, the aerosol scan has the capacity to localize regional abnormalities of lung clearance.

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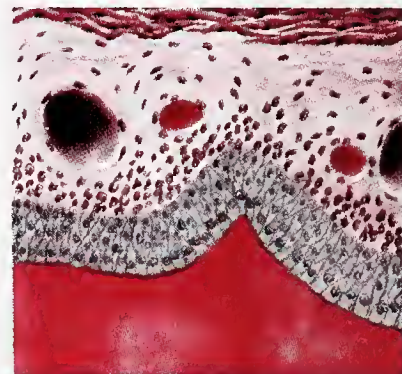
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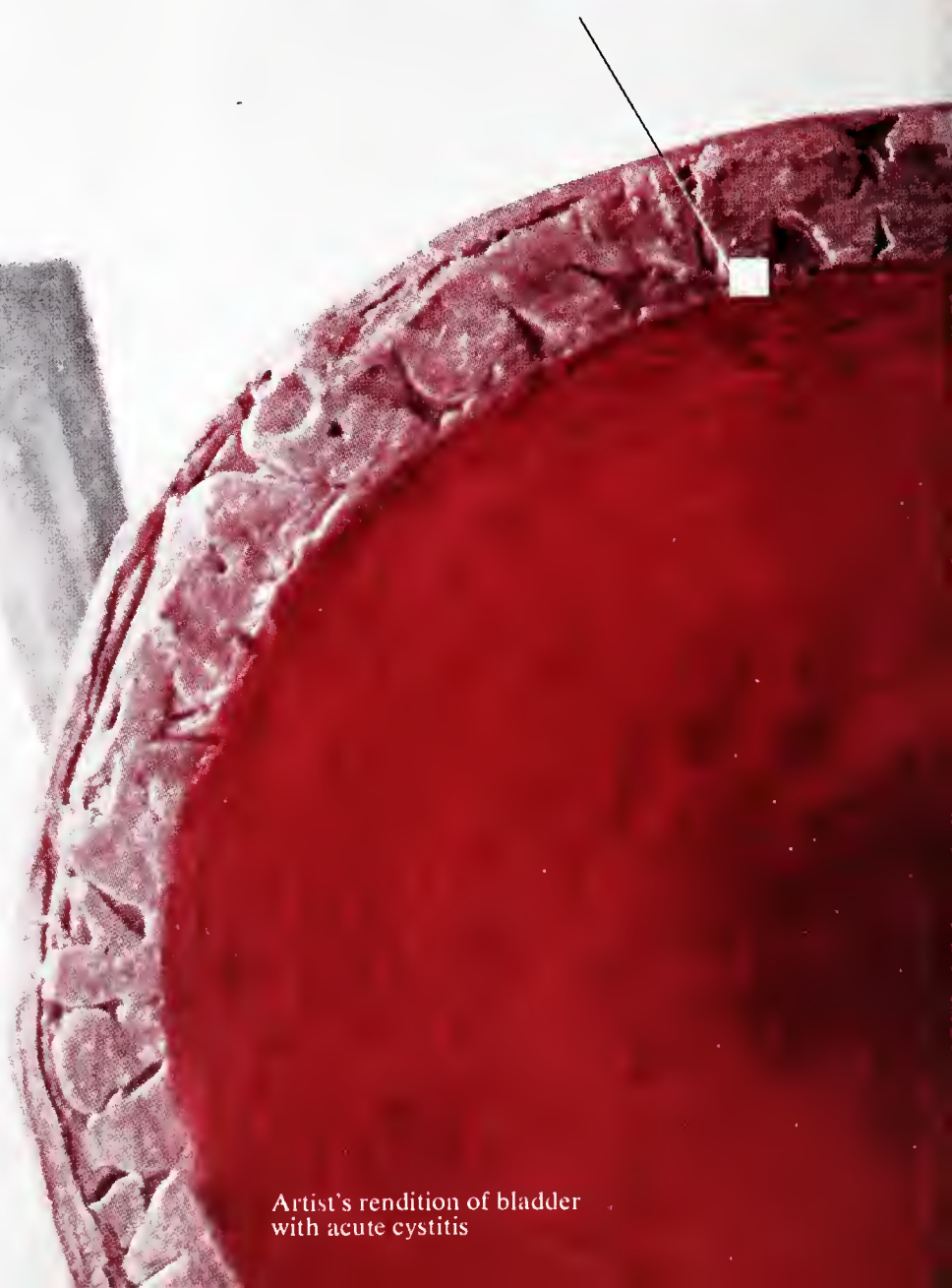
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*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

JA72 1848-6

globin; hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

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A Triple Approach to Resuscitation of the Newborn

Richard B. Clark, M.D.*

The development of methods for resuscitation of the depressed newly born infant is a long and often confusing story. Some of the methods that have been proposed in the past have actually caused harm to the infant; most have been of little help. Such methods as dilatation of the anal sphincter, alternating hot and cold baths, excessive stimulation, the use of potent stimulant drugs, intragastric oxygenation, rocking beds, the Bloxom air lock, and phrenic stimulation have been in vogue for a time, only to be discarded. It is now apparent there is no substitute for the principles involved in the treatment of other, older patients in extremis; clearing of the airway, ventilation of the lungs with oxygen, and support of the circulation.

Resuscitation of the newborn seems to be easily divisible into three categories: pulmonary resuscitation, chemical resuscitation, and cardiac resuscitation. Pulmonary resuscitation involves actively inflating the lungs with oxygen, usually through an endotracheal tube. As most newborn infants are quite acidotic (as are older patients who have experienced cardiac arrest), correction of the acidemia appears to be of benefit. Hence we have coined the term "chemical resuscitation." And finally, if circulation has ceased, cardiac massage is indicated. This discussion will describe these methods of treatment of the depressed newborn infant.

Pulmonary Resuscitation

Treatment of the depressed newborn varies with the severity of the depression. The nasopharynx of the normal infant (one minute Apgar score 8-9-10) is suctioned, and he is laid in a warm bed, preferably with a slight head down

tilt. Some mild slapping of the feet will be useful in initiating crying. The mildly depressed infant (Apgar 5-7) is suctioned, the feet slapped, oxygen is blown across the face, and the heart rate is counted². These same maneuvers are employed in the moderately depressed infant (Apgar 3 and 4), and if the heart rate falls below 100, or if respirations are inadequate, the infant's lungs are inflated with a bag and mask (Fig. 1). In infants with an Apgar score of 0-2 the trachea is intubated by direct laryngoscopy and ventilated, usually by mouth to tube resuscitation (Fig. 2). An oxygen hose is held near the operator's mouth. The lungs may be ventilated by the operator's mouth, or an attached bag, but either method carries the risk of lung rupture if excessive pressures are utilized, although this is less likely with mouth to tube resuscitation.



Figure 1.

Infant resuscitation with bag and mask. Note the oxygen hose leading into the bag. Resuscitation of the newborn, in expert hands, may be accomplished almost as effectively, with bag and mask as with an endotracheal tube.

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Figure 2.
Mouth to tube resuscitation. Most depressed newborn infants (one minute Apgar score 4 or less) exhibit a marked acidosis. The injection of NaHCO_3 , along with pulmonary ventilation, is useful in treating these infants.

A pressure of 25 cm water, with a tidal volume of 30-40 cc is needed initially to inflate the unexpanded lungs of the newborn (Fig. 8). After expansion, inflation pressures of 10-15 cm with tidal volumes of 10-20 cc are used. Pressure should not be kept on for periods longer than 1-2 seconds. It is especially important to limit the initial inflation pressures (25 cm) to .5 to 1.0 second, as lung rupture can occur at 25 cm, if

maintained for longer periods. This pressure, however, is necessary to inflate the unexpanded lung. If the infant has already breathed, or cried, pressures of 10-15 cm are all that are required.

Suction of the infant's nose and mouth is usually sufficient to clear the airway. Copious amniotic fluid, or thick meconium, may require passage of the catheter into the trachea for adequate cleansing.

Ventilation of the lungs is the most important step in resuscitation. One person can perform this, but ideally, three persons resuscitate the depressed infant. The second person auscultates lungs, and counts the heart rate. The third member of the team engages in the additional techniques, which, although not quite as necessary as pulmonary ventilation, have won acceptance as an integral part of infant resuscitation.

Chemical Resuscitation

The normal newborn suffers at birth from a moderate respiratory and metabolic acidosis, a result of labor and delivery (Table 2) (Fig. 9). If obstetrical complications occur during intra-uterine existence, there will be further hypoxia and hypercarbia, and a very low pH (7.10 to 6.90), low pO_2 (even approaching 0), high pCO_2 (60 mm or higher), and low base excess (the normal for this indicator of metabolic acidosis is ± 2.5 , but in the depressed newborn may be as low as -10 to -20). The worse the acid base findings, the lower the Apgar score, as the Apgar score correlates with the umbilical artery pH.¹ Virtually all obstetrical complications, pro-

pH	7.40	(7.36 - 7.44)
pO_2	95	(93 - 102) mm Hg
pCO_2	40	(34 - 46) mm Hg
B. E.	0	(+2.5 to -2.5) meq/L

Table 1.
Normal adult arterial acid-base values.

U. A. M. C. "Normal" Acid Base Values
(51 Infants) (± 1 S. D. in Parenthesis)

	U. A.	U. V.	F. V. (1 hr.)
pH	7.22 (.06)	7.32 (.05)	7.31 (.06)
pO_2	22.4 (5.2)	34.5 (9.6)	39.9 (9.7)
pCO_2	56.5 (11.3)	40.8 (6.6)	44.2 (10.8)
B. E.	-6.0 (3.3)	-5.1 (3.2)	-4.5 (3.3)

Table 2.
Normal infant values at birth (clamped sections of umbilical artery and vein) and at one hour of age (femoral vein). Blood from the umbilical artery flows from fetus to placenta, and represents fetal status. The umbilical vein carries blood from the placenta to the fetus, and is indicative of placental functioning. Note higher pH and pO_2 , and lower pCO_2 and base excess in the umbilical vein. Femoral vein values denote improvement in acid-base values with time.

INFLATING PRESSURES

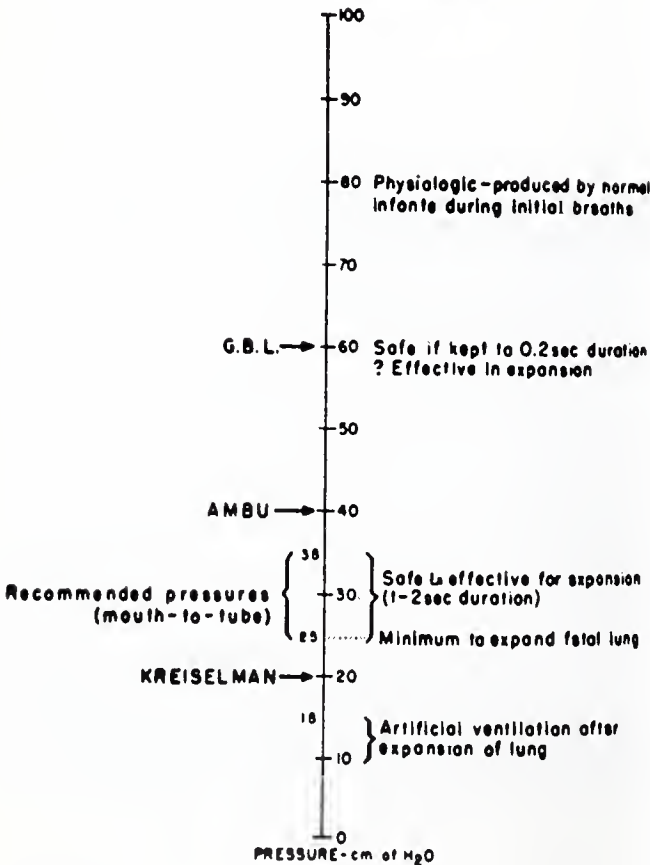


Figure 8.
Inflating pressures. Intrapulmonic air pressures used or observed in the newborn. Used with permission of Connecticut Medicine.⁶

lapsed cord, prolonged labor, eclampsia, maternal hypotension, difficult forceps, placenta previa, breech presentation, etc., result in decreased oxygen supply to the fetus, hypoxia, hypercarbia, anerobic glycolysis, lactic acidemia, and respiratory and metabolic acidosis. Thus almost all depressed infants are severely acidotic (Fig. 9). The exceptions are those depressed from anesthesia (Fig. 10). Depression from cyclopropane, meperidine,¹ secobarbital,² etc., is via the central nervous system, and does not produce excessive acidosis until respiratory inadequacy after birth results in postnatal hypoxia. Of course, the depressed infant can be depressed from both acidosis and anesthetic drugs.

Reversal of this acidosis can be eventually achieved in most newborns by pulmonary venti-

lation, but a more rapid improvement in acid base status results in a more rapid recovery. The acidosis also produces pulmonary vasoconstriction, decreased oxygen uptake, longer recovery, and perhaps a greater chance of hyaline membrane disease, so that rapid correction of the acidosis may actually be life saving.

Our "chemical resuscitation" involves threading a catheter into the umbilical vein, and injecting sodium bicarbonate. The cord is cut to $\frac{3}{4}$ " to 1", and the umbilical arteries and vein observed in the Wharton's jelly (Fig. 3). The catheter, a #5 or #8 French premature feeding tube, is inserted until blood can be aspirated into a heparinized syringe (Fig. 4). This blood is later analyzed for acid-base parameters, but treatment is not delayed by the determinations. The heparinized syringe is laid aside, and a syringe of 10 cc of NaHCO_3 , 0.9 mEq/ml, is connected. The entire contents of the syringe are injected over a two to three minute period (Fig. 5). More

ACID BASE BALANCE-COMPARISON OF RECOVERY FROM BIRTH ASPHYXIA IN VIGOROUS AND DEPRESSED INFANTS

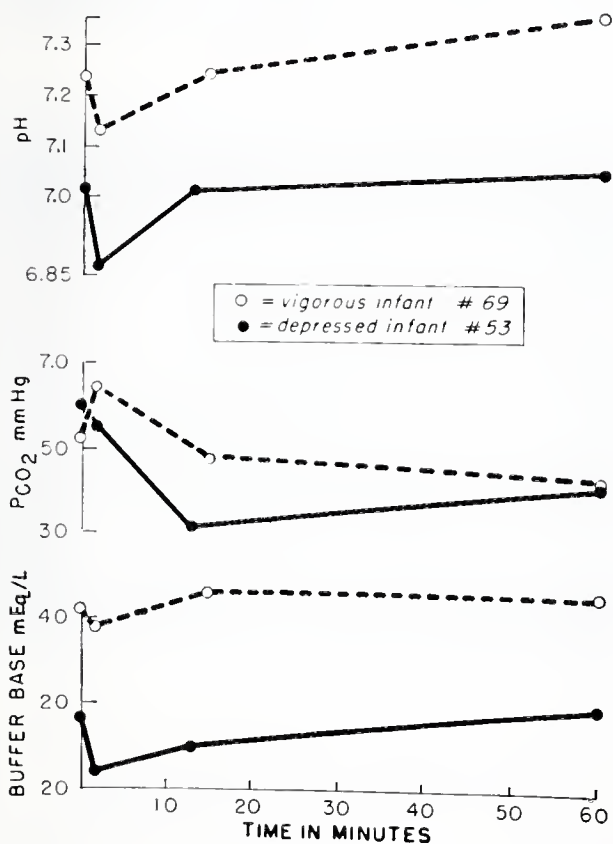


Figure 9.

Recovery from birth asphyxia. The pattern of change in pH, and buffer base in a vigorous infant (dotted lines), delivered after an easy and uncomplicated labor of a multiparous mother who had required neither analgesia nor anesthesia. This is compared with a severely asphyxiated infant (continuous line), who was born under regional anesthesia following signs of fetal distress, bathed in thick meconium, and with the umbilical cord wrapped 3 times around his neck. At delivery he was limp and unresponsive. Following prompt resuscitation, the first breath occurred at $3\frac{1}{2}$ minutes, and well sustained respirations continued thereafter. The pCO_2 fell rapidly, but the metabolic acidosis showed a much slower rate of recovery. Used with permission of J. B. Lippincott Co.⁴ and the author.

THE EFFECT OF DRUGS ON RECOVERY FROM BIRTH ASPHYXIA

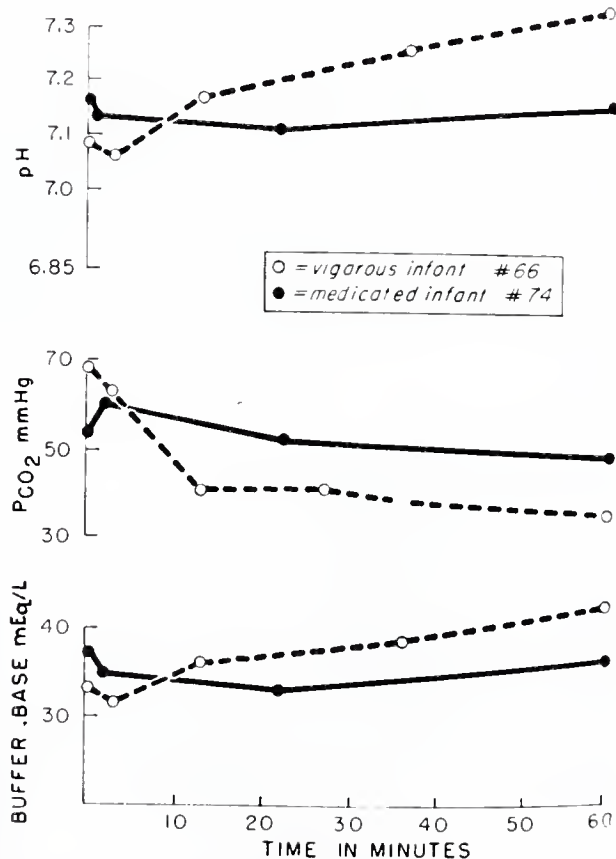


Figure 10.

Drug effect on recovery. Comparison of an infant delivered with no sedation or anesthesia (dotted line), with an infant whose mother was given 200 mg. of barbiturate and 100 mg. of meperidine over three hours prior to delivery (continuous line). Both infants were in the vigorous group and breathed spontaneously within seconds of delivery. The difference in rate of recovery is unmistakable, the continued elevated pCO_2 being evidence of hypoventilation in the medicated infant. Used with permission of the J. B. Lippincott Co.⁴

may be given, up to 5 mEq/Kg, without acid-base monitoring, if these facilities are not available.

The use of the organic buffer THAM³ seems desirable for a number of reasons. THAM penetrates the cell membrane, in contrast to bicarbonate, which does not. Bicarbonate also carries a high solute (sodium) load. In actual practice, however, bicarbonate is the safer and more practical, as it does not have to be freshly made up. THAM may also cause apnea, and hyperkalemia.

The results of treatment with bicarbonate are often remarkable. The infant, previously limp and cyanotic, develops a flush, his color and tone improve, and he starts breathing and crying. Results are often this dramatic (Fig. 7). If one does not wish to thread a catheter to inject the bicarbonate, it may be injected into the umbilical vein via a needle. Also, it is desirable to inject a

10% dextrose (10-15 cc) during resuscitation, to provide extra carbohydrate for the infant.

Other drugs are seldom needed. Pentylene-tetrazol⁴ or picrotoxin are too toxic. If depression from a narcotic is diagnosed, a narcotic antagonist, levallorphan,⁵ may be given intravenously to the infant (0.05-0.10 mg). Doxapram⁶ and

⁴Metrazol, Knoll.

⁵Lorfan, Roche.

⁶Dopram, Robbins.



Figure 3.

Intubating the umbilical vein. After securing with suture, the cord is held between the fingers and cut close to the abdomen. The two umbilical arteries, and the umbilical vein, are apparent. The plastic catheter is inserted into the umbilical vein.



Figure 4.

Drawing a sample. The catheter is carefully advanced until blood can be aspirated. Acid-base measurements are made before and after injection of bicarbonate.



Figure 5.

Injecting the bicarbonate. The bicarbonate is injected at the rate of 2-3 mEq./minute. Up to 5 mEq./Kg. body weight may be given empirically without acid-base monitoring.

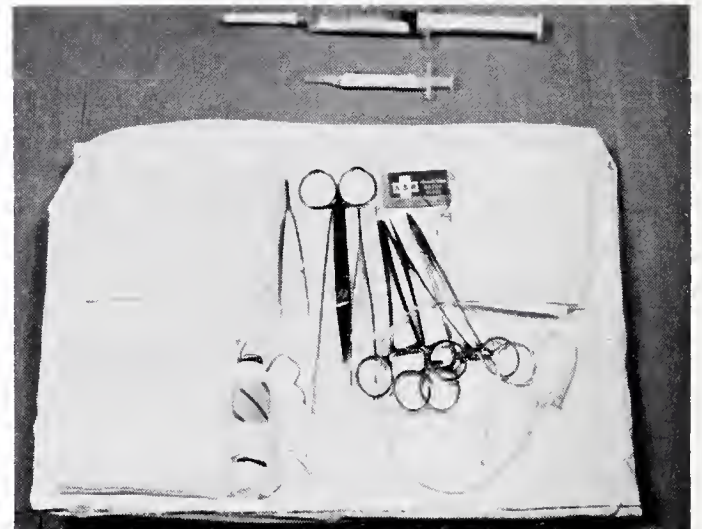


Figure 6.

Equipment. Little is needed. Illustrated are forceps, suture, #5 French plastic catheter (radio-opaque), heparinized 2 cc syringe, 10 cc syringe of NaHCO₃ (0.9 mEq./ml.).

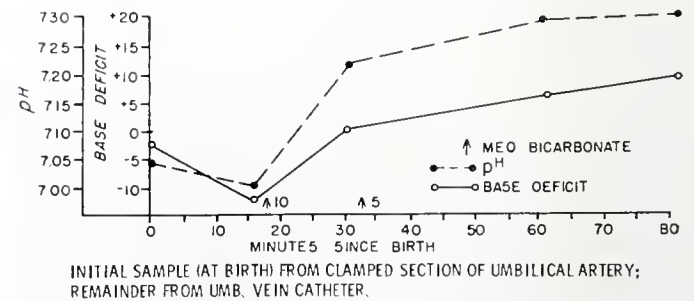


Figure 7.

Results in chemical resuscitation in an Apgar⁴ breech infant. Note rise in pH and base deficit. Clinical improvement is evidenced by flushing, improved muscle tone, and crying.

ethamivan⁷ have been recommended, but the only stimulant we have used is caffeine, and this only when the pulmonary and chemical resuscitation have not produced a response.

Cardiac Resuscitation

Stillborn infants have been revived on a few occasions, by closed chest cardiac massage. If the fetal heart was heard up until delivery, and if one thinks there is a good chance of salvaging a normal infant, one should try cardiac resuscitation in conjunction with the other types of resuscitation. The fingers should depress the sternum one hundred times a minute (Fig. 11) while the lungs are inflated. Epinephrine, 0.2 cc of 1:1000 concentration, is given intravenously.

A number of normal children are now alive and developing normally in this country, who

⁷Emivan, USV Pharm.



Figure 11.

Cardiac resuscitation. Location of the fingers in closed chest cardiac massage of the newborn. Endotracheal tube is here omitted for simplicity. Used with permission of Connecticut Medicine⁶ and the author.

had an Apgar score of 0 at birth. They were saved by these types of resuscitation. If one anticipates a neurologic cripple, even after resuscitation, perhaps cardiac massage should not be performed. It would, however, seem that the infant should be given the benefit of any doubt.

Summary

Successful resuscitation of the depressed newborn depends on establishment of a clear and patent airway, and rapid and effective ventilation of the lungs with oxygen. The lungs are inflated by means of a bag and mask, or via an endotracheal tube. While this is being accomplished, a very useful adjunct is correction of the metabolic acidosis by injection of sodium bicarbonate. If the heart beat is absent, or slow, cardiac massage may salvage a useful member of society.

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Kidney Transplantation for Rapidly Progressive Glomerulonephritis

J. A. Richardson et al (USPHS Hosp, San Francisco)

Lancet 2:180-183 (July 25) 1970

Two patients, oliguric from rapidly progressive glomerulonephritis, received successful kidney grafts from cadaver donors. Each had poststreptococcal immune-complex nephritis. They both tolerated periodic hemodialysis and bilateral ne-

phrectomy well. One patient, despite stable renal function, has had persistent proteinuria since transplantation. Examination of a biopsy specimen, taken two years after grafting, showed electron-dense deposits consistent with recurrent immune complex disease, but no proliferative glomerulonephritis. Patients with renal failure from poststreptococcal, rapidly progressive glomerulonephritis can be treated successfully by hemodialysis and transplantation.

Rationale for the Use of Salt Solution

Intra and Post Operatively

Wayne B. Glenn, M.D.*

The management of operative and early post-operative intravenous fluid therapy in the 1940's and much of the 1950's was considerably influenced by work presented by Collier and Associates. They showed that surgical patients given salt and water in the early postoperative period would not excrete either in the expected manner—retaining both. As a result, only Dextrose in water was given in the operative and early post-operative period in maintenance quantities—2000-3000 ml/24hr for an adult. As more information became known about the physiologic action of the adrenal cortical hormones and the factors influencing their secretion, some evidence suggested that salt retention observed in the post-operative period was associated with increased levels of urinary 17-hydroxy corticosteroids noted following the stress of Anesthesia and Surgery. It is now known that the hormones of adrenal cortical origin measured by urinary 17-hydroxy corticosteroids levels have a minor effect relative to electrolyte metabolism when compared to the effect of aldosterone. The effect of increased aldosterone activity upon salt metabolism is for the body to retain sodium and water at the expense of increased urinary potassium loss.

A study by Hayes and Associates in 1957 (which has not received the emphasis it deserves) clarified much of the confusing opinion and data that existed then and to a lesser extent now, relative to salt and water metabolism associated with anesthesia and surgery. In careful studies, he demonstrated that the normal average insensible water loss for afebrile, nontraumatized adults was approximately 1000 ml/m²/24hrs. Of this 1000 ml of water /m²/24hrs, approximately 200 ml was made available from endogenous metabolism; thus, only 800 ml/m²/24hrs. was required exogenously to meet the total insensible water needs. In addition to the insensible water requirement, water is needed as a vehicle for the urinary excretion of the endogenously produced solute load. How much water is needed for this

function depends upon the solute load, renal function, antidiuretic hormone (ADH) activity, among other factors. Hayes measured the total solute load in six healthy adults undergoing anesthesia and surgery and receiving maintenance quantities of dextrose 5% in water. Under these conditions, the mean solute load was 200, 250 and 300 milliosmols per meter square of body surface area per twenty four hours on the operative, first, and second postoperative day respectively. The mean volume of urine excreted in these patients on the respective days was 240, 400 and 480 ml per meter square per 24 hrs. This corresponds to an average urine osmolality of 830 milliosmols/liter on the operative day; 560 milliosmols/liter and 625 milliosmols/liter on the first and second postoperative day respectively. When one considers that the range of urinary dilution and concentration in the normal adult kidney is approximately 100 to 1400 milliosmoles per liter (the latter figure is more often about 1000 milliosmols/liter) then the osmolalities above probably represent considerable antidiuretic hormone activity even though it was not specifically estimated. This increased antidiuretic activity was shown to be initiated by premedication and anesthesia; however, its duration was found to be primarily a function of the degree of surgical trauma. The increased antidiuretic activity as manifested by the patient's inability to excrete a water load in a normal manner was found to be less than 4 hours duration after anesthesia with essentially no trauma and less than 12 hours duration after anesthesia and minor surgical trauma (simple inguinal hernia repair). In patients experiencing extensive surgical trauma (sigmoidectomy, etc.) their ability to excrete a water load persisted in a decreasing fashion through the third postoperative day after which no statistical differences could be shown.

Thus the total water requirement for insensible water loss is 1000 ml/m²/24hrs. in the afebrile fasting patient. About 200 ml/m²/24hrs. of this water will be made available as free water produced from metabolism. This leaves approxi-

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EXCRETION OF A WATER LOAD
200cc. 5% d/w/m²/hr-8hrs.
mean \pm SD
(6 patients)

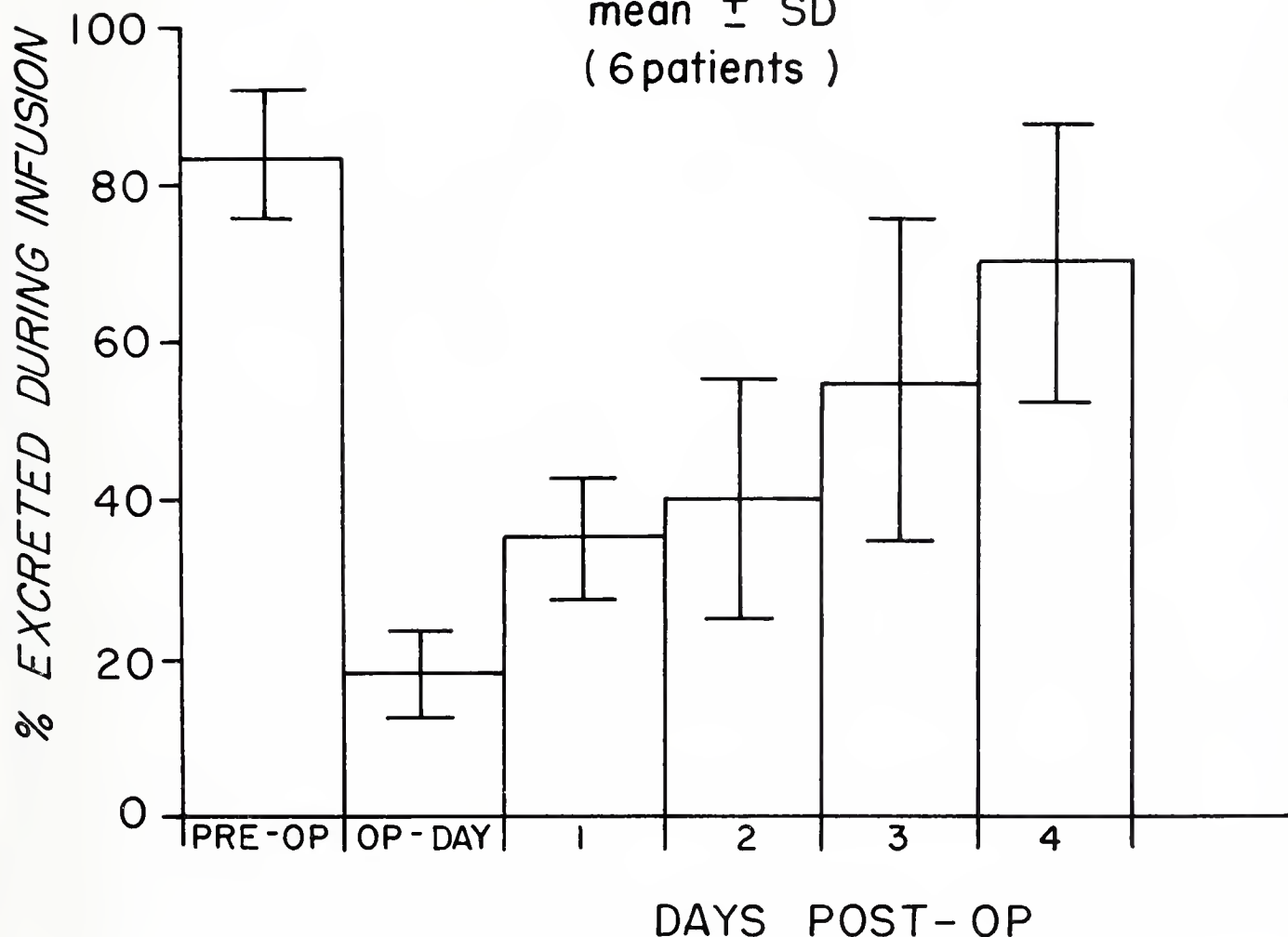


Figure 1.

From Hayes, M., and Associates. *Surgery*, Vol. 41:366, 1957.

mately 750 ml/m²/24hrs. that must be supplied the patient. To this 750 ml/m²/24hrs. must be added the water required for obligatory urinary excretion of the solute load which is approximately 250 ml/m²/24hrs. on the operative day, plus an additional 350 ml for each of postoperative days one and two. For a 70 Kg adult with a surface area of about 1.7 m², the *minimum* total water required is 1700 ml for the operative day, 1700 ml + 350 ml for the added urinary solute load or a total of 2050 ml for each of the first and second postoperative days. If these quantities of fluids are administered evenly over a 24 hour period, this would amount to 70 ml/hr. for the operative day and about 80 ml/hr. for each of the first and second postoperative days.

In studies evaluating salt metabolism and adrenocortical activities, Hayes and Associates demonstrated that normal patients not subjected to operative procedures given the same diet ex-

cept for varying sodium content, had no change in urinary 17 hydroxy corticosteroid excretions but did have markedly different levels in urinary aldosterone excretion. Patients on a diet containing only 4 meq of sodium/m²/24hrs. for a period of 8 days had urinary aldosterone values of 31 meq/m²/24hrs. and were in positive sodium balance. This is in contrast to patients on the same diet except for a sodium content of 183 meq/m²/24hrs. This group had urinary aldosterone values of 2 meq/m²/24hrs. An intermediate group on a diet with sodium content of 20 meq/m²/24hrs. after 8 days had 11 meq/m²/24hrs. aldosterone output. This latter group was in sodium balance; however, this was at the expense of elevated aldosterone excretion (normal = approximately 5 meq/m²/24hrs). The ability of these three groups to excrete an additional salt load was evaluated on the 9th day of the diet. Each was given intravenously 60 meq sodium/m²

body surface area over a one hour period in the form of a 3% sodium chloride solution. The percent of the total dose excreted in the urine 4 hours after the infusion is shown.

Thus far, the data indicate that salt deprivation will increase aldosterone secretion independently of 17 hydroxy corticosteroids and also that the normal patient on a high salt intake and with suppressed aldosterone secretion, will excrete an additional salt load in the urine in a normal manner. Salt deprivation in a normal patient results in an increased aldosterone secretion and under these circumstances when challenged by a salt load, most of the administered salt will not be excreted but retained, thus demonstrating so called "salt intolerance".

Hayes then studied the surgical patient. Just

before the pre-anesthetic medication was given, an infusion of Ringers lactate solution was started at the rate of 1000 ml/m²/24hrs. which was continued through anesthesia and surgery. Following surgery, the solution was changed to 1/3 Ringers lactate and 2/3 dextrose 5% in water and this was continued for three days. The total sodium content (42 meq sodium/m²/24hrs.) was based on measured urinary sodium losses in normal patients. These patients continued to excrete sodium in the urine in the operative and post operative period exactly as they did pre-operatively. Further, when challenged on the first postoperative day with an additional salt load administered intravenously as a 3% NaCl solution over a one hour period, the amount of sodium excreted in the urine four hours later was about 60% of the total dose as compared to about 70% for the same period in non-surgical patients on a high sodium diet.

The operative patients with this fluid regimen responded much better to the added salt load than did non operative patients on a moderately restricted sodium diet.

This work documents the need and desirability of salt administration during the operative and post operative period in major surgical procedures to minimize the physiological disturbance of salt metabolism. It suggests that the well recognized "post operative salt intolerance" of earlier years was the result of increased aldosterone secretion secondary to salt deprivation that routinely occurred at that time when the emphasis of fluid therapy was primarily related to replacement of insensible water loss. This paper may be interpreted in light of present day practices as indicating the minimum salt load needed to suppress the tendency for increased aldosterone secretion that is sometimes seen with major operative surgery. It does not tell us how much above this minimum salt requirement should be given or is even desirable. This is still an area of some controversy.

The question of how much salt solution to administer in the operative period is an open one. The factors which influence this decision are multiple and include among others the maintenance requirement for water and electrolytes, the operation and its duration, the degree of surgical trauma incident to the procedure, presence or absence of pre-existing deficits in blood, water and/or electrolytes, operative fluid shifts

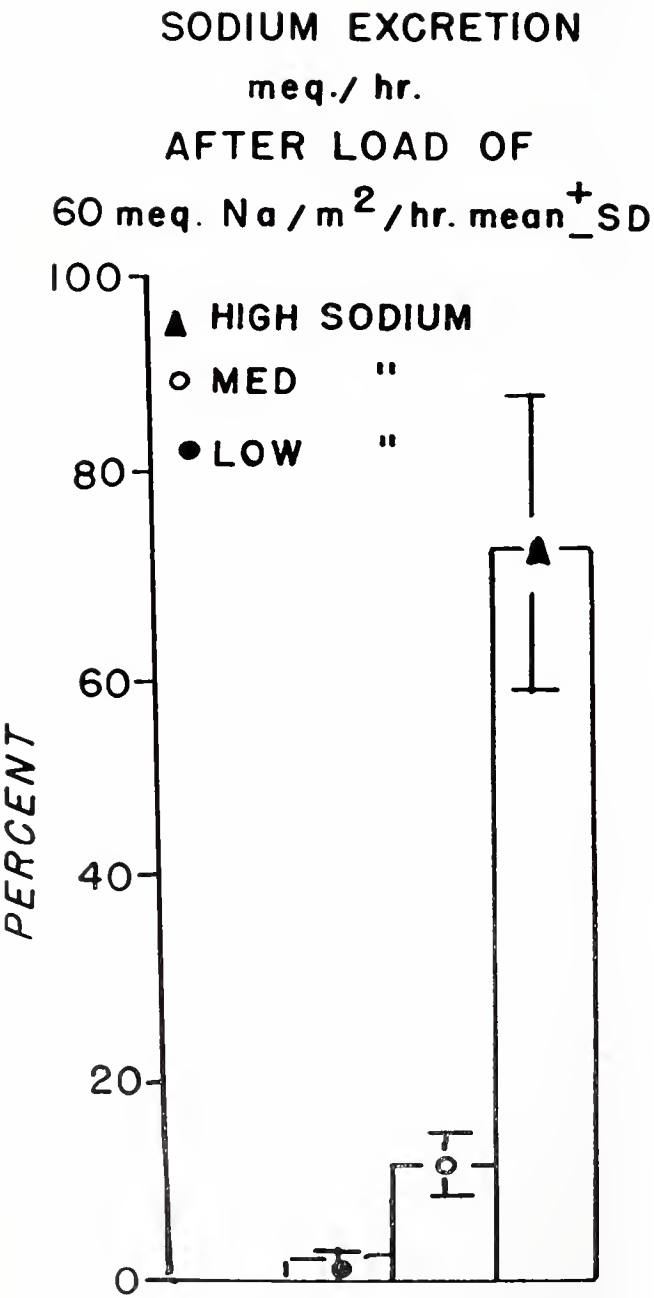


Figure 2.
From Hayes, M., and Associates. *Surgery*, Vol. 41:376, 1957.

and operative hemorrhage. It would appear that no particular anesthetic or technique exhibits marked superiority over others when equal skill is used in administration. Patients with pre-existing blood, water and electrolytes disturbances will not be dealt with.

The minimum requirements for water and electrolytes, particularly sodium have been alluded to for the adult patient for elective surgery. Recent evidence suggests that the water requirement of 1000 ml/m²/24hrs. in the adult also holds for the infant, but larger requirements for sodium and potassium are needed, about 2.5 mg/kg/24hrs.

Operative fluid shifts have been correlated with surgical trauma. The greater the trauma the greater the shifts in extracellular fluids. Shires, measured changes in red cell mass, plasma volume and functional extracellular fluid (that portion of the total extracellular fluid which equilibrates rapidly with radio active sulfate ions, and therefore the most dynamic portion) incident to anesthesia and minor superficial surgical procedure. He found no change in the red cell or plasma volume and only a 3% or less decrease in extracellular fluid space. With anesthesia and major abdominal procedures, deficits in the ECF that could not be accounted for, from measured and estimated external losses, ranged from 0-28% of the total ECF. The average deficit was 13%. This deficit specifically could not be correlated with operative blood loss, but did seem to correlate with the degree of surgical trauma—degree of traction, manipulation of intestine, etc. The red cell mass and plasma volume changes were accounted for by the measured losses and since there was no change in the plasma electrolytes to suggest dilution or concentration, an isotonic fluid shift from the functional ECF seemed plausible. This shift was presumed to be an internal redistribution of the extra-cellular fluid.

The value of salt solution in the treatment of hemorrhagic shock is well known. In survival studies from hemorrhagic shock in dogs, Shires evaluated various forms of replacement therapy. He demonstrated that replacement of the shed blood alone resulted in an 80 percent mortality; replacement of shed blood plus 10 cc. of plasma per kg weight resulted in a 70 percent mortality; replacement of the shed blood plus lactated Ringers solution equal to 5 percent of their body

weight resulted in a 30 percent mortality. Significantly, in all three of these groups, the measured functional ECF during the shock period was 42 percent. Following replacement with shed blood alone the ECF deficit still was 28%; shed blood plus 10 cc/kg of plasma replacement resulted in a residual ECF deficit of 30% and replacement with shed blood and Ringer lactate solution equal to 5% of body weight revealed no residual decrease in functional ECF. The improved survival with salt solution was equated with correction of the extracellular fluid deficit by Shires. The improved survival of dogs subjected to hemorrhage shock and treated with blood replacement plus salt solution by Dillion and Associates is equated with the restoration of functional corporal sodium mass and not due solely to inadequate circulating fluids per se. Some support for this latter concept is found in hemorrhagic shock studies in dogs with better survival rates in those treated with blood and hypertonic saline. Experiments in rats, designed to study various factors which are protective to the subsequent development of acute tubular necrosis of the kidney from hemorrhagic shock show that the salt loaded diuresing kidney is most protected and that the dehydrated rat producing concentrated urine is most susceptible.

The routine pre-operative order "ss enemas till clear" and "NPO post midnight" may result in a more dehydrated patient than ordinarily suspected. This is suggested from an average 3.8 pound weight loss in 15 patients which were weighed just before the enemas were started, again 30 minutes from the time the enemas were finished and again at 6:30 the following morning. There was essentially no change in body weight in four patients receiving saline enemas the night before surgery.

There is little question now that salt solution can and should be administrated to the operative patient to minimize water and electrolyte disturbance. If there is minimal operative trauma and no significant blood loss, then maintenance water and electrolytes will suffice. If major abdominal or thoracic surgery is planned requiring considerable retraction and manipulation of the visera but minimal blood loss then one can expect fluid shifts to occur that will result in a decreased functional extracellular fluid volume. This frequently leads to a more unstable operative course relative to the vital signs and more

importantly, decreased renal perfusion with oliguria. The largest deficit that has been measured and reported under these circumstances in about 30 percent of the total estimated ECF volume.

In a 70 kg patient this amounts to approximately 3.5 liters of isotonic salt solution. The replacement of 30 percent of the estimated total ECF is considered as the upper limit. Since the average deficit measure was only 13%, many patients will be quite stable and have adequate renal perfusion with something considerable less than this maximum. In surgical procedure where considerable hemorrhage is expected and/or occurs with or without significant operative trauma salt solution is indicated for two reasons. First, to bolster the decreasing ECF volume that occurs from hemorrhage and secondly, to maintain circulating intra-vascular volume. Clinical experience has demonstrated that a 10% blood loss can be tolerated without much replacement of any sort, and it is permissible to allow a total blood loss of 20% without replacement if the blood is lost gradually and assuming the hemoglobin and hematocrit and blood volume were normal to start. The second 10% blood loss should be "replaced" with about 3 cc of isotonic salt solution per cc of whole blood lost. Anything over 20% of the blood volume is replaced by whole blood. In this manner many one or two unit transfusions can be avoided. Post operative maintenance water and electrolytes are given usually in the form of $\frac{1}{3}$ normal saline in dextrose 5% water or its equivalent.

The rationale for the use of a balanced salt solution in the surgical patient may be summarized:

a. Balanced salt solution is given intraoperatively to support extracellular fluid shifts and suppress aldosterone secretion. This in turn allows the kidney to handle salt in a fairly normal manner, which leaves how much salt solution to be given somewhat open ended.

b. Salt solution is given to support vascular

volume from blood loss to a limited degree, thereby avoiding many one or two unit blood transfusions.

c. It clinically reduces the incidence of vascular instability associated with anesthesia and surgery.

d. Under abnormal conditions such as unsuspected acute blood loss with hypotension a salt loaded patient will be protected to some extent from developing acute tubular necrosis of the kidney.

e. The administration of salt solution in the operative and post operative period will prevent acute dilutional hyponatremia and water intoxication that occasionally is seen in the post operative period when more than 3000 ml of dextrose 5% in water is given intravenously/24hrs.

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Prolonged Endotracheal Intubation Versus Tracheostomy In Infants and Children

Walter S. Guinee, M.D.*

The management of acute respiratory distress in infants is a problem in any hands. Tracheostomy, a traditional method of establishing an airway is frequently a lifesaving measure; however, it carries a high incidence of complication and a high mortality in infants and small children. There are many conditions that require prompt establishment and maintenance of an adequate airway. A few of these are listed in Table I.

TABLE I

- I. Trauma
 - 1. Physical
 - 2. Burn Injuries
 - A. Smoke
 - B. Heat inhalation
- II. Infection
 - 1. Upper Respiratory
 - A. Epiglottitis
 - B. Cricoid Ring Inflammation
 - C. Tonsillitis
 - 2. Lower Respiratory Tract
 - A. Bronchiolitis
 - B. Asthma
 - C. Pneumonia
- III. Anatomical
 - 1. Pierre Robin Syndrome
 - 2. Tracheal Web
- IV. Postoperative Obstruction
 - 1. Adenotonsillectomy
 - 2. Pharyngeal Flap
 - 3. Cricoid Edema
 - A. Surgical trauma
 - B. Bronchoscopy
 - C. Traumatic Tracheal Intubation
- V. Pulmonary Edema
- VI. Tumors

Undoubtedly, tracheostomy has saved many lives. The procedure has been performed under controlled conditions by qualified surgeons as a precautionary measure either preoperatively or postoperatively. Tracheostomy has been done at the bedside in thousands of instances and even by untrained lay people on the sidewalk, in eating places, etc. In spite of the many benefits of tracheostomy the procedure is not without its hazards. In infants and children the mobility and mortality rate is even greater than that encountered in adults. Allen and Smith¹ in re-

viewing 1,829 admissions for croup reported an overall mortality of one percent but a tracheostomy mortality of 30 percent of all admissions for croup had a tracheostomy and of these cases 1 in 3 died. Few, if any, of these operations were performed in a surgical theatre by trained surgeons and none had a general anesthetic.

The overall incidence of complications ranging from tracheal ulceration to death has been reported to be between 20 and 50 percent²⁻³. One of the most serious sequelae other than death is tracheal stenosis. Westgate⁴ in reporting on 1,243 patients who underwent tracheostomy reported a mortality rate of 51.8 percent and a survival rate of 48.2 percent. Tracheal stenosis related to tracheostomy developed in 12.5 percent of the patients zero to two years of age and 5.4 percent in those three to nine years of age as compared to 2.9 percent in a thirty to thirty-nine year age group and 4.1 percent in the twenty to twenty-nine year age group. Tracheal stenosis is a serious complication of tracheostomy but by far not the only complication that can occur.

TABLE II

NASO-TRACHEAL INTUBATION

- | | |
|--|--|
| 1) Tracheal (sub glottic) stenosis | 1) Tracheal stenosis |
| 2) Tracheal erosion (mucosa) | 2) Tracheal erosion (mucosa, wall) |
| 3) Erosion of vocal cords | 3) Mediastinitis |
| 4) Necrosis of nares | 4) Pneumothorax |
| 5) Granulomata of cords | 5) Pneumopericardium |
| 6) Plugging of catheter (mucous) | 6) Hemothorax |
| 7) Accidental extubation | 7) Surgical error (high tracheostomy, damage to cricoid, vocal cords, incision into esophagus) |
| 8) Difficulty after extubation (requiring re-intubation) | 8) Hemorrhage |
| | 9) Infection of incision |
| | 10) Pneumonia |
| | 11) Nursing care (short, fat neck—obstruction of tracheostomy tube orifice) |
| | 12) Displacement of tracheostomy tube |
| | 13) Difficulty in closing stoma |

As is seen in Table II, naso-tracheal intubation is not without its complications. The most seri-

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ous, those of tracheal stenosis, tracheal erosion, vocal cord erosion and necrosis of the nares is in almost all instances due to employing too large an endotracheal catheter or attempting to employ a cuffed endotracheal catheter. Necrosis of the nares occurs from either using too large a catheter or one that is improperly positioned. Plugging of the catheter by encrusted mucous occurs when proper humidification is not employed or adequate suctioning is not done by the attending personnel. Granulomas of the vocal cords following tracheal intubation in almost all instances clear spontaneously over a period of two to three weeks. Difficulty in maintaining an airway after extubation is a rare occurrence and can usually be handled by reintubating the trachea. This author has seen one case, that of a five year old child who could not maintain an adequate airway after extubation and in whom tracheostomy was performed in the operating room under general endotracheal anesthesia under controlled conditions and by a competent surgeon. No difficulty was encountered during the procedure or postoperatively and eventually his tracheostomy was closed two years later.

Tracheal stenosis is the most common sequela of tracheostomy. Stenosis occurs most often at or above the level of tracheostomy. However, a diffuse obstruction has been reported extended from the cricoid cartilage to four centimeters above the carina resulting from chondromalacia of the tracheal rings and replacement of the anterior tracheal wall by scar tissue⁴.

The most common type of stenotic lesion is usually a fibrous web or circumferential stenosis at the site of tracheostomy. (These lesions can usually be corrected by dilatation or by resection of the stenotic area and end-to-end anastomosis of the trachea). As indicated above, the web or circumferential stenosis is not the only type lesion that can occur. The obstruction may involve quite an extensive portion of the trachea necessitating permanent tracheostomies.

Tracheal erosion can be quite severe and disastrous (Case #1).

Pneumothorax or hemo-pneumothorax or pneumopericardium is not an infrequent complication of tracheostomy in infants and in small children.

Pernasal Tracheal Intubation Versus Tracheostomy

It is not the purpose of this paper to condemn tracheostomy but to review some of the complications and sequelae of tracheostomy and to suggest an alternate method of establishing and maintaining an adequate airway in infants and small children.

In principal this is not a new technique⁵. As with any technique it must be done properly to be successful and to avoid unnecessary complications. First, only polyvinyl chloride endotracheal catheters should be used. Red rubber catheters are entirely too irritating to be used for anything but the very shortest of situations. Silastic (Dow Chemical) appears promising but as of yet is unavailable in tubes of the necessary length to use in pernasal tracheal intubation. The catheters need not be sterile but this is preferable. If using gas sterilized catheters one must be absolutely certain that enough time has been allowed for elution and removal of any traces of ethylene oxide. (Note: no PVC tube should ever be gas sterilized if it was initially sterilized by gamma ray radiation). An endotracheal catheter that has been scrupulously cleaned and dried, and protected from the environment in an individual container is entirely satisfactory.

Secondly, the procedure should be carried out under heavy sedation or preferably general anesthesia with adequate muscle relaxation. A RELIABLE SOURCE OF OXYGEN AND A MEANS WHEREBY TO DELIVER IT WITH POSITIVE PRESSURE AND AN ADEQUATE SUCTION APPARATUS MUST BE AT HAND. For these reasons it is best in most cases that this procedure be carried out in the operating theatre where all of this equipment is available. However, a successful naso-tracheal intubation can be carried out at the bedside by utilizing ultra short acting intravenous barbituate followed by an intravenous dose of short acting muscle relaxer such as succinylcholine.

It does no good and indeed a great deal of harm to attempt a naso-tracheal intubation in a frightened, struggling hypoxic infant or child. The struggling worsens the hypoxic state and the instrumentation further obstructs an already compromised airway. It goes without saying that in the pre-mature or neonate or in the flaccid moribund child, anesthesia and muscle relaxation may not be needed.

The decision when to employ this technique is made based upon the criterion used to determine when any form of artificial maintenance of an airway is needed, that is, signs of respiratory distress: 1) Retraction of the rib cage (especially increasing severity of retraction); 2) Signs of hypoxia, cyanosis in 100% oxygen, restlessness, agitation, or in severe hypoxia, collapse; 3) Hypercarbia as evidenced by a rising $p\text{CO}_2$ or a $p\text{CO}_2$ of 70 torr or above.

Technique

In most cases a dangerous degree of upper respiratory obstruction is present. The child is restless often in spite of previous sedation. Pre-medication consists of an appropriate dose of Atropine (0.01 mg. per lb. of body weight). If an adequately functioning intravenous infusion is present, the anesthetic may consist of one of the

ultra short acting intravenous barbituates followed by ventilation of the patient with 100% oxygen. With moderate to strong assistance to inspiration the pressure differential across the obstructed segment of the airway will be increased and the patient ventilated quite adequately. Following a dose of intravenous succinylcholine (0.5 mg. per lb. of body weight) an appropriately sized well lubricated P.V.C. (Portex, Opaque) is inserted through the nostril. The hypopharynx and larynx are visualized directly using a laryngoscope. Usually a straight blade is preferred. The endotracheal catheter is advanced until it enters the larynx. If necessary, the catheter can be guided into position and inserted between the vocal cords with a gentle push using a Magill forcep. (See Table 3 for endotracheal catheters sized and lengths).

Endotracheal Catheter Guide - Arkansas Children's Hospital - Walter S. Guinea M. D.

AGE	WEIGHT *		TRACHEAL Lengths - Cm (Cords to Carina) +	TRACHEAL DIAMETER ++		ENDOTRACHEAL CATHETER SIZE +		CATHS USED ACCORDING TO AGE (Fr) +++		LENGTH of CATH. (Cm)	C = CUFF NC = NO CUFF
	LBS	Kg.		Sagittal	Coronal	mm (I.O.)	Fr (O.C.)	Sizes used most often	Minimum & Maximum		
NEWBORN	3-5		4.0	—	—	3, 3.5	12, 14	—	—	10	NC
NEWBORN	5-7		4.0	5.0	6.0	4.0	16	13	13-17	12	NC
1-3 MO.	7-12	3.36	3.8	6.5	6.8	4.5	18	16	13-18	13	NC
6 MO.	16.7	7.58	4.2	7.6	7.2	4.5	18	16	13-24	14	NC
9 MO.	20.0	9.07	4.3	7.0	7.8	4.5, 5	18	18	14-25	14	NC
1 YEAR	22.2	9.48	4.3	7.0	7.8	5.0	20	20	16-23	15	NC
18 MO.	25.5	11.43	4.5	9.4	8.8	5.0, 5.5	20	20	16-23	15	NC
2 YEARS	27.7	12.56	5.0	10.8	9.4	5.5	20	20	18-24	16	NC
3 YEARS	32.2	14.61	5.3	9.1	11.2	5.5	22	23	17-25	16	NC
4 YEARS	36.4	16.5	5.4	—	11.0	6.0	24	24	18-26	17	NC
5 YEARS	40.5	18.37	5.6	—	—	6.0	24	24	20-27	17	NC
6 YEARS	48.3	21.9	5.7	10.4	11.0	6.5	26	26	23-28	18	NC
8 YEARS	60.1	27.26	6.3	—	—	6.5	26	27	24-30	18	NC/C
10 YEARS	71.9	32.6	6.3	—	12.4	7.0	28	30	24-30	20	NC/C
12 YEARS	84.4	38.28	6.4	—	—	7.0	28	29-30	26-31	20	NC/C
14-15 YRS.	115-130	—	7.2	10.7	13.5	7.5	30	30	29-31	24	NC/C

* 50th Percentile (Boys) from data compiled from Studies of Child Health & Development Children's Medical Center, Harvard School of Public Health, Boston, Mass.

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NOTE: Add 2cm in length for naso-tracheal catheters

If an intravenous infusion is not running to the child an inhalation anesthetic may be administered employing halothane in oxygen or halothane, nitrous oxide and oxygen 50%. With assisted respiration the gases can be forced past the obstruction and proper ventilation achieved. Once the child is anesthetized an intravenous infusion should be started, and the muscle relaxant administered by this route or the succinylcholine may be administered intramuscularly. In the neonate the intramuscular route is preferred to lessen the incidence and severity of cardiac irregularities caused by succinylcholine in the young infant.

Quite often the infant or child has been sedated quite heavily because of his restlessness. If this be the case, one needs only to assist ventilation as described above and then administer a proper dose of succinylcholine and proceed with the described intubation.

In cases of upper respiratory tract obstruction due to edema of the cricoid ring the normal sized endotracheal catheter cannot be passed. For this reason a selection of several size catheters should be on hand. We suggest having available the size that would ordinarily be used, a catheter one size larger, and the next three sizes smaller than that one would ordinarily expect to use. For example, if a 4 mm. inside diameter catheter would ordinarily be employed then one must also have available 2.5 mm., 3.0 mm., 3.5 mm., and 4.5 mm.

Regardless of which of the above techniques has been employed, ventilation must be controlled until spontaneous respiration is resumed.

After intubation, thorough auscultation of the chest is done to determine if both lungs are being ventilated equally and that the tip of the catheter lies in the trachea and not in one of the main stem bronchi. When it is determined that both lungs are being ventilated the catheter is marked at the point where it enters the nostril. The nose, upper lip and cheeks are painted with tincture of Benzpin and when this has dried sufficiently the catheter is firmly fixed in place with adhesive tape. A chest x-ray should be taken to confirm the position of the endotracheal tube radiographically. The child is not ready for appropriate respiratory therapy as the situation demands, i.e. mist tent, ventilator therapy, etc.

Regardless of the ensuing treatment, good nursing care must be present with the child upon whom a tracheotomy has been performed.

Proper humidification cannot be stressed enough. Humidification is important to prevent crusting of secretions and plugging of the catheter. If the child is placed in a mist tent the nebulizer employed should produce a fog dense enough to partially but not completely obscure the patient. The nursing personnel must still be able to observe the child! Most modern day ventilators are equipped with humidification systems that are quite adequate.

Suctioning of secretions in the catheter and lower respiratory tract should be carried out as often as necessary, using a "no touch" aseptic technique. With adequate humidification and suctioning the catheter can remain in place many days. There is no set rule regarding changing the catheter. If signs of increased work of respiration or obstruction of the catheter become evident then the catheter should be changed using the same technique, alternating nostrils.

If the catheter should become plugged completely or to a point where severe retractions and other signs of respiratory obstruction ensue, the nursing personnel should be instructed to remove the catheter. The catheter when in place will act as a stent and the opening thus formed will usually insure adequate ventilation for 30 minutes to an hour. In other words if the catheter becomes plugged it should be removed and this will usually allow enough time for the physician to replace the catheter without the child suffering severe distress.

Extubation

The decision when to extubate the trachea is based mainly on the child's clinical condition, that is improvement of or complete resolution of the underlying pathology. For instance, if the problem was edema of the cricoid ring due to infection, as the infection subsides so will the edema and the child will begin to breathe around as well as through the tube. He may cough around the endotracheal tube or even vocalize around it. In all cases the physician must be guided by the clinical situation as well as laboratory information.

When the decision has been made to extubate the trachea the child should be prepared by administering Decamethasone intramuscularly or intravenously. A dose of two mg. for those under

two years of age and 4 mg. for those under four years of age has been found to be quite satisfactory. Thirty minutes to an hour after this injection, the trachea is extubated following thorough suctioning of the mouth and pharynx to remove secretions that possibly could cause laryngeal obstruction. Equipment should be at hand for re-intubation should it become necessary. **BE READY TO RE-INTUBATE.**

The following case reports illustrate some of the problems that can be encountered both with tracheostomy and nasotracheal intubation. They also illustrate some of the advantages of both short termed and prolonged nasotracheal intubation.

Case No. 1

B. G., a three year old female was admitted to the hospital with a diagnosis of "croup". The history as given by a relative of the child was somewhat vague but consisted primarily of increasing stridor and hoarseness over a 24 to 36 hour period. Physical examination revealed an apparently healthy child with a temperature of 100 degrees F. rectally with a "moderate retraction of the suprasternal notch and rib cage." White blood count was 19,100 with a predominance of 72% lymphocytes. The child was admitted to the hospital via the emergency room at about 4:00 p.m. At about 9:00 p.m. on the date of admission, a tracheostomy was performed at the bedside by an attending house officer because of "increasing stridor and retraction". A number 3 silver tracheostomy tube was inserted in the usual fashion. Immediate relief was obtained and the child slept comfortably through the night. Her condition seemed to be improving as indicated by a reduction in the white blood count to 9,200 with a shift toward a more normal distribution of the cellular element. On the third day after tracheostomy she suddenly spiked a temperature to 104 degrees rectally. The white count then was 24,800 with 72% polymorphonuclear cells. Copious secretions were suctioned from the tracheostomy. Her condition continued to follow a rapid and down hill course and she expired on her sixth hospital day despite intensive and aggressive antibiotic and fluid therapy.

At post mortem the significant findings were limited to the thorax. The silver tracheostomy tube had eroded through the soft tissues of the posterior wall of the trachea and into the

esophagus. The patient died of a fulminating mediastinitis.

This case points out rather well one of the more serious complications that may arise from tracheostomy. The number 3 tracheostomy tube was perhaps slightly large for this child and eroded through the trachea and esophagus. This series of events would probably not have occurred had a polyvinyl chloride naso-tracheal catheter been in place as this material will warm and soften and conform to the adjacent anatomy when it reaches body temperature

Case No. 2

A. M., a 3-year-old female was admitted to the hospital from the emergency room in acute respiratory distress, with a presumptive diagnosis of acute epiglottitis. She was struggling violently for each breath with suprasternal and infrasternal retractions being very evident. Temperature was 103 degrees F. rectally.

Due to the alarming degree of obvious respiratory tract obstruction the child was brought immediately to the operating room with the intention of performing a tracheostomy under general endotracheal anesthesia. It was suggested to the pediatrician that since the major problem was that of upper respiratory tract obstruction this could perhaps be treated just as well with a naso-tracheal airway rather than performing a tracheostomy. This was agreed upon and a general anesthetic was administered using halothane, nitrous oxide and oxygen 50% with assisted respiration. When it was determined that the patient could be adequately ventilated under the mask an intravenous dose of succinylcholine was administered and laryngoscopy carried out. The epiglottis and surrounding tissues were quite red and edematous, confirming the diagnosis of acute epiglottitis. A 4.5 mm. naso-tracheal catheter was inserted without difficulty and anchored with adhesive tape. After spontaneous respiration resumed and determined to be adequate the child was taken from the operating room and placed in a mist tent.

Under a regimen of Ampicillin, intravenous fluids and humidification provided in a mist tent, her condition improved rapidly. Three days after admission her temperature was 98.4 degrees F. orally, WBC was 8,400 and her general clinical picture was excellent. She was taken to the operating room where a general anesthetic

was administered using IV barbituate, halothane, nitrous oxide-oxygen and succinylcholine for relaxation. Laryngoscopy revealed the epiglottis to be of normal size with minimal residual erythema. The surrounding tissues were judged to be "normal." Four mg. of Decamethasone was given IV and the trachea extubated.

The child was taken to the PAR where she was observed for three hours. When it was evident there was no ensuing respiratory distress she was returned to her room. The remainder of the hospital course was uneventful and she was discharged on the 5th day.

This case points out that upper airway obstruction due to inflammatory processes as well as obstruction due to traumatic or anatomical conditions can be handled by means other than tracheostomy.

Case No. 3

R. S., an eight-day-old male was admitted to hospital, having been referred by his local physician with a diagnosis of Neonatal Tetanus. He had been exhibiting clinical signs of Tetanus for two days, i.e., trismus, rigidity of the extremities, and generalized convulsions increasing in incidence and severity. The convulsions were precipitated by light, noise, etc., and were accompanied by varying degrees of cyanosis.

On examination, he appeared to be a critically ill infant. Temperature was 100 degrees rectally, rales were heard in the right upper and lower lung fields. Examination was difficult and limited because touching the infant brought on convulsions. He was started on a regimen of Diazepam, phenobarbital, and intravenous fluids. His condition remained essentially the same for 18-20 hours. At that time a member of the anesthesia department was called in consultation because of the now almost constant cyanosis. It was suggested that a naso-tracheal catheter be inserted, the infant sedated with phenobarbital, curarized for muscular relaxation and a proper ventilatory state maintained with a mechanical ventilator. Since an IV was functioning, curare was used as the muscle relaxant for intubation. A 3.0 mm. I.D. polyvinyl chloride catheter was inserted without difficulty with a gentle assist using an infant Magill forcep. Immediately after intubation and ventilation the baby was pink. The naso-tracheal catheter was fixed securely in place with adhesive tape after the skin was protected with Tr. benzoin, a naso-

gastric tube was inserted for feeding, an adequate IV started and ventilation carried out using a pressure-controlled respirator.

It was determined after several doses, that 1.5 mg. of curare IV would achieve the desired degree of muscular relaxation for adequate control of respiration for 4-6 hours. The house staff officers on duty (anesthesiology and pediatrics) administered the drug. After approximately 48 hours it became apparent that a dose of 5.0 mg. of curare IV would maintain an adequate degree of relaxation for proper ventilation for 24 hours.

The usual regimen of sedation, antibiotics and general supportive care was carried out. Special duty nurses were present 24 hours a day. Suctioning of the endotracheal tube was done when deemed necessary, using a "clean, no touch" technique. At first, the endotracheal tube was changed every 48 hours. It soon became apparent that this was not necessary. Thereafter, the catheter was changed, alternating nostrils, when needed, i.e., evidence of plugging, difficulty in passing a suction catheter, etc. The N.T. catheter was changed on an average of every five days. On these occasions, the vestibule of the larynx and surrounding tissues were noted to be apparently normal. The vocal cords were retracted laterally, the tube acting as a dilator or stent.

After 12 days of curarisation it was elected to attempt ventilation under sedation only, this was successful and no more curare was used. It was hoped the infant would begin to make respiratory efforts on his own; this did not occur until the 22nd day after intubation. When he began to make efforts, he was gradually "weaned" off the ventilator by increasing the time off the machine—first in 15-20 second intervals, and then longer periods of time as he tolerated it. By day 27 he was on assisted ventilation, by day 32 he was breathing spontaneously with the N.T. tube in place. Blood gas studies were well within normal ranges, the baby appeared to be doing well clinically, he had gained four pounds and exhibited no neurological defect. On day 37 the N.T. catheter was removed. He continued to do well and was discharged 45 days after admission.

Repeated examinations by the pediatrician and pediatric neurologist revealed no sequelae.

After two years he was lost to follow up when the family moved out of state.

Discussion

Tracheostomy undoubtedly has saved countless lives, but it is not without its hazards. This is especially true in infants and small children. Tracheostomy is undertaken hesitantly in the newborn infant.⁶ The establishment and maintenance of an adequate airway is an absolute necessity if a patient is to survive. "Some folk seem glad even to draw their breath" (Wm. Morris). Sometimes the problem is mainly upper airway obstruction, other times respiration needs to be assisted or controlled; still, on other occasions the major problem consists of copious secretions, infected or not, that need to be removed. An artificial airway is helpful and indeed often life-saving in these situations.

Pernaso-tracheal intubation lends itself nicely in dealing with these problems. This technique requires the same diligent, fastidious nursing care as does a tracheostomy.

The standard 15 mm. catheter connector accommodates any ventilator without the need for other adaptors (that seem to always be getting "lost"). One advantage this author has noticed in regard to suctioning through an endotracheal catheter as opposed to a tracheostomy tube, is that the nursing personnel are less "squeamish" about an N.T. catheter and the connector gives them "something to hold on to" while suctioning or performing tracheobronchial toilet.

Naso-tracheal intubation should be strongly considered in lieu of tracheostomy in infants

and children under three years of age. It would seem to be the procedure of choice when considering the complications and sequelae attendant unto the two techniques. Tracheostomy is the traditional method of obtaining an emergency (or elective) airway, but this does not mean it is the only way! "There are sure to be two prescriptions diametrically opposite . . ." (H. D. Thoreau).

Summary

Some of the complications and sequelae of tracheostomy in infants and small children are discussed as well as some of the advantages and complications of naso-tracheal intubation. Several case histories are presented to illustrate these advantages and disadvantages. Naso-tracheal intubation is offered and encouraged as an alternative to tracheostomy in infants and children under age three.

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Treatment of Secondary Hepatic Tumors by Ligation of Hepatic Artery and Infusion of Cytotoxic Drugs

I. M. Murray-Lyon et al (R. Williams, King's College Hosp, London)

Lancet 2:172-175 (July 25) 1970

Eleven patients with symptoms due to secondary tumor deposits in the liver were treated by ligation of the hepatic artery, and in five this was followed by infusion of the portal vein with 5-fluorouracil. Liver function was moderately disturbed in all patients but none went into hepatic failure, and the one postoperative death was

due to a cardiac arrhythmia. The surviving ten achieved good relief from abdominal pain for up to ten months, and most gained weight. Serial scintiscans showed reduction in size of the deposits, and tumor necrosis was demonstrated on liver biopsy. In three patients with the carcinoid syndrome the necrosis was reflected biochemically by an immediate and striking rise in urinary 5-hydroxyindoleacetic acid excretion followed by a return towards normal levels, and in these patients it is preferable to precede hepatic artery ligation by a period of hepatic artery infusion with cytotoxic drugs.

Intercostal-Celiac Plexus Block for Abdominal Surgery In the Poor Risk Patient

Charles W. Quimby, Jr., M.D.*

In the poor risk patient, the appropriate distribution of his cardiac output and the adequate perfusion of his tissues may be either deranged markedly or maintained only by maximal compensation. Even though the anesthetic regimen for any patient must be thoughtfully chosen from those anesthetic drug(s) and technique(s) available so that they do not alter or alter only as little as possible the delivery of oxygenated blood, substrate, and electrolytes to his tissues, the choice of an anesthetic regimen for the poor risk patient is crucially important. When the anesthesiologist chooses an anesthetic regimen, he must also anticipate the regimen's effect on the adequacy of the patient's tissue perfusion postoperatively.

The severely injured, the critically ill, or the elderly patient must be impeccably prepared for anesthesia. In other words, the poor risk patient's blood and extracellular volume, his hemoglobin concentration—oxygen carrying capacity, serum, electrolytes, blood pH, and urinary output must be restored to or near their normal levels before anesthesia can be induced. All this must be done prior to the induction of anesthesia to insure that the patient's cardiovascular system is able to perfuse his tissues adequately during the added stress of anesthesia.

In addition to adequately maintaining the anesthetized patient's tissue perfusion, the anesthesiologist's responsibility is to provide freedom from pain and, if appropriate, amnesia for the surgical procedure, and at the same time, afford the surgeon a quiet, relaxed abdominal field. An intercostal block combined with a celiac plexus block not only fulfills these criteria, but also interferes with the patient's tissue perfusion as little as possible.

Blocking the intercostal nerves, which are mixed nerves, with the appropriate concentration of a local anesthesia drug relaxes, i.e., paralyzes, the muscles of the anterior abdominal wall and anesthetizes the skin, subcutaneous tissues,

and the peritoneum of the anterior abdominal wall. An intercostal block has several advantages: it avoids the use of muscle relaxants; it avoids the use of general anesthesia in operations confined to the abdominal wall, such as repair of dehiscences of an abdominal incision; and, it interferes with tissue perfusion little, if at all.

Finally, immediately postoperatively the residual analgesia from the block lets the patient move about in bed, sit up, breathe deeply, and cough, all without pain. An intercostal block for abdominal surgery facilitates the stir-up regimen postoperatively. Another prime advantage of the intercostal block is that the anesthesiologist can repeat it postoperatively and confidently expect to cut down or avoid the use of narcotics for postoperative pain relief.

If an intercostal block is elected for use in a severely emphysematous patient who uses his intercostal muscles almost exclusively to breathe, the anesthesiologist must be prepared to assist or control the patient's breathing to insure adequate alveolar ventilation until the motor block of the intercostal nerves has worn off.

Blocking the celiac plexus anesthetizes the upper abdominal viscera, the gall bladder, stomach, small intestines, the ascending and about one-half of the transverse colon, and interrupts the sympathetic control of the gastrointestinal tract. This interruption results in an unopposed parasympathetic control of the gastrointestinal tract and means that peristalsis is not blocked and the gut is able to contract. The surgeon finds it easier to close the abdomen that contains a small, contracted gut than an abdomen full to overflowing with dilated bowel.

A celiac plexus block also interrupts the sympathetic control of the blood vessels of the abdominal viscera, i.e., the splanchnic bed. Dilation of the splanchnic bed, by receiving a disproportionately large percentage of the cardiac output, interfere with the appropriate distribution of the cardiac output and may lead to inadequate tissue perfusion. Since the anesthesi-

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ologist can anticipate this enlargement of the splanchnic bed he can avoid a potentially dangerous alteration in tissue perfusion by the careful administration of from 500 ml to 1000 ml of a balanced salt solution immediately prior to the institution of the block. In short, additional fluid is added to an enlarged reservoir.

Even though the anesthesiologist had infused a balanced salt solution prior to blocking the celiac plexus, he must be able to manage any significant, unexpected interference with the appropriate distribution of the cardiac output both quickly and expeditiously. A fall in blood pressure, poor capillary refill, nausea, retching, vomiting, disorientation and loss of consciousness are signs of inadequate tissue perfusion calling for immediate treatment. To increase the venous return to the heart and, thereby, reestablish tissue perfusion, the anesthesiologist can elevate the patient's legs, rapidly infuse more fluid, and/or use vasopressors judiciously, preferably in that order.

Although a celiac plexus block is obviously not indicated in the hypovolemic patient whose maximally stimulated, intact sympathetic nervous system is maintaining perfusion of his vital organs, this does not mean that an intercostal block is also not indicated in the hypovolemic patient. On the contrary, an intercostal block does not interfere with the appropriate distribution of the cardiac output. Furthermore, it avoids the use of general anesthesia or decreases the depth needed if it is used. An intercostal block gives the surgeon a relaxed abdominal wall without the use of muscle relaxants. In other words, an intercostal block *without* a celiac plexus block is most useful in the hypovolemic patient who requires abdominal surgery.

Because a celiac plexus block does not anesthetize the pelvic viscera, it is not useful for pelvic operations. The anesthesiologist must anticipate the patient's anesthetic requirements for additional analgesia, if, in the course of the operation, the surgeon manually explores the pelvis. For the duration of the pelvic exploration, nitrous oxide and oxygen either alone or augmented give the required, extra analgesia. The anesthesiologist can augment the nitrous oxide and oxygen not only with intravenous thio-barbiturates or narcotics but also with low concentrations of potent general anesthetic drugs.

Similar augmentation can be used to provide amnesia for the entire procedure.

In some operations, the anesthesiologist may, at his discretion, elect to use endotracheal intubation to isolate the tracheobronchial tree from the gastrointestinal tract. Topical anesthetization of the larynx or light general anesthesia is needed so that the patient can comfortably tolerate the endotracheal tube.

Alternatives to intercostal-celiac plexus block are local anesthesia, spinal anesthesia, and general anesthesia which has three disadvantages. First, potent general anesthetic drugs depress the heart and decrease cardiac output both intra-operatively and postoperatively. Decreased cardiac output is one of the major factors that cause postoperative hypoxemia, which the poor risk patient tolerates poorly. During anesthesia, assisted or controlled ventilation and increased partial pressure of oxygen in the inspired gas compensates for the decreased cardiac output and ameliorates or avoids hypoxemia. However, in the postoperative period, unless the poor risk patient receives a high partial pressure of oxygen in the inspired air, he is exposed to hypoxemia with all its attendant dangers.

Second, potent general anesthetic drugs depress the normal respiratory and cardiovascular control by their central depression until their brain concentration is sufficiently lowered by either exhalation, distribution, or metabolism. Depending upon the mass of drug to be removed and the drug's physical characteristics, this may take a long time, if soluble anesthetic agents, diethyl ether and methoxyflurane, are used.

Finally, the anesthetic regimen that includes muscle relaxants has the inherent dangers of prolonged curarization, recurarization (fatigue of the unblocked muscle bundles), and unrecognized, partial curarization with its associated, progressive hypoxia and hypercarbia that may set the stage for a cardiac arrest.

Spinal anesthesia's prime disadvantages are an extensive sympathetic blockade which can interfere with the appropriate distribution of the cardiac output and an extensive motor paralysis that interferes with the stir-up regimen post-operatively.

Premedication

Since parasthesias are not sought in either the intercostal or celiac plexus block, the anesthesi-

ologist can use premedication as heavy or as light as his judgment dictates.

Equipment

The basic equipment needed to perform these two blocks can be conveniently combined in one regional block tray:

- One 2 ml syringe;
- One 10 ml syringe, preferably with finger rings;
- One 25-gauge, $\frac{5}{8}$ inch security-bead needle with Huber point;
- One 22-gauge, $1\frac{1}{2}$ inch security-bead needle;
- One 22-gauge, 4 inch security-bead needle;
- One 20-gauge, 6 inch security-bead needle;
- 250 ml saline or balanced salt solution;
- One graduated 250 ml stainless steel pitcher, or a small stainless steel basin;
- One prep cup;
- Eight sponges;
- Six towels;
- Sterilizer control.

To this tray can be added an ampule of epinephrine 1:1000 and the local anesthetic agent of the anesthesiologist's choice.

In the poor risk patient, the anesthesiologist usually uses one-half, two-thirds, or three-quarters of the maximum safe dose for the particular agent. Reduction of the mass of local anesthetic agent used is especially important in the aged, chronically ill, or the debilitated patient. However, in the severely injured, but otherwise robust patient, the anesthesiologist may, at his discretion, elect to use the usual dose. After determining the total mass of drug that can be used and the volume of solution needed for the blocks or blocks to be done, the anesthesiologist must decide whether or not the resultant concentration will be effective. If the concentration is not effective then he can select another local anesthetic agent or another technique.

Obviously, the duration of the local anesthetic drug must exceed the expected duration of the surgical procedure. Lidocaine and mepivacaine last approximately one to three hours; procaine lasts approximately 45 minutes to an hour and one-quarter. The duration of action of lidocaine and procaine can be extended by the addition of epinephrine; mepivacaine's duration of action is little affected by the addition of epinephrine. If the anesthesiologist does choose to use epi-

nephrine, he should limit himself to using 0.2 ml epinephrine 1:1000 in 20 ml or more of solution. By restricting himself to this dose, the anesthesiologist avoids the administration of large doses of epinephrine to his patient. The longer duration of action of the local anesthetic drugs is given by those solutions containing epinephrine.

Intercostal Block

Intercostal and celiac plexus blocks can be done with the patient sitting, lying on his side, or prone. If there is a rapid fall in blood pressure with a celiac plexus block, syncope is less likely to occur if the patient is on his side or prone. Another advantage of the prone position is that it is more convenient for the anesthesiologist.

For an intercostal block, the patient is placed prone with a pillow from his iliac crests to the nipple line on the operating room table or cart whose foot end can be elevated. His arms hang over the sides of the table so that the scapula are rotated outward. The anesthesiologist stands at whichever side of the table is more convenient for him.

Landmarks — Intercostal Block

The angle of the ribs are palpated and marked at their lower edge with a suitable marking pencil or felt pen from the twelfth to the fifth rib bilaterally. The angle of the twelfth or last rib is found by palpating the end of the rib laterally and following it medially until just before it can no longer be felt. This point is found to be at the lateral margin of the paraspinal muscles and approximately three inches from the midline. Next, the highest rib whose angle can easily be palpated is marked at its lower edge; it is usually the fifth or sixth rib. These two points are then connected and the line is extended superiorly (Fig 1). The same procedure is repeated in the opposite side; the resulting lines run nearly parallel to the midline but are slightly further apart at the lower end than above. On this line the lower edges of the angles of the ribs are marked up to the fifth rib.

Celiac Plexus Block

A line is drawn connecting the angles of the last rib. The spinous process of the twelfth vertebra is identified by the method of Moore and marked. Moore recommends that a line be drawn between iliac crests. In the midline, this line crosses either the fourth lumbar spinous process or the interspace between the spinous

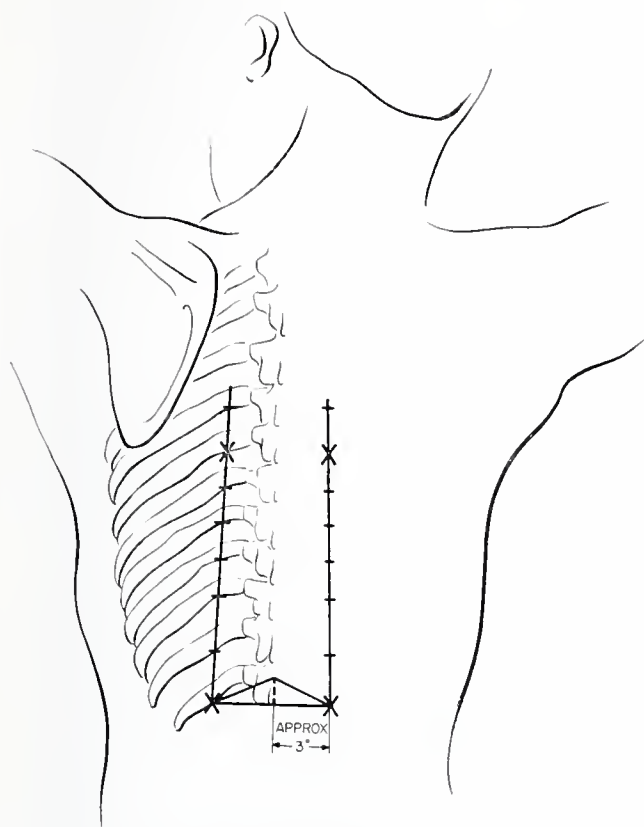


Figure 1.

For the intercostal block, the ribs are marked at their lower edge. For the celiac plexus block, the flat triangle is drawn and each needle is inserted at the lateral end of the triangle and each side of triangle toward the apex of the triangle.

processes of the fourth and fifth lumbar vertebra. The index finger of the right hand is placed at the L3, 4 interspace and the index, long, and ring fingers of the left hand are placed at the L2, 3; L1, 2; and T12, L1 interspaces respectively. The spinous process of T12 is above (cephalad) the anesthesiologist's left ring finger. The round or knob-like shape of the T12 spinous process distinguishes it from the longer lumbar spinous processes. The spinous process of T12 is marked. Two lines are drawn from T12 to the angles of the twelfth or last rib. These two lines complete a flat triangle whose base is the line connecting the angles of the last rib.

With the patient appropriately sedated, the anesthesiologist raises a skin wheal at the lower edges of each rib that is marked, using a 25-gauge, $\frac{5}{8}$ inch security-bead needle. To block the intercostal nerves, the anesthesiologist uses a 22-gauge, $1\frac{1}{2}$ inch security-bead needle, and the 10 ml syringe with finger rings. In very thin patients instead of the $1\frac{1}{2}$ inch needle, the $\frac{5}{8}$ inch needle can be used. With the index finger of his free hand, the anesthesiologist draws the skin wheal superiorly over the body of the rib; the needle is introduced perpendicularly in all

planes through the skin wheal and subcutaneous tissue until it contacts the rib (Fig. 2). At this point, the anesthesiologist rests his hand on the patient's chest and grasps the hub of the needle with the thumb and index finger of his free hand. He does this to keep control of the needle while he is searching for the edge of the rib and injecting (Fig. 3).

Once on the rib, the anesthesiologist slowly withdraws the needle and lets the skin walk the needle to the edge of the rib. At the edge of the rib, the anesthesiologist carefully advances the needle point until he feels it penetrate ("pop through") the intercostal membrane. Often when the anesthesiologist finds the needle is at the edge of the rib he will feel the characteristic pop without having to advance the needle.

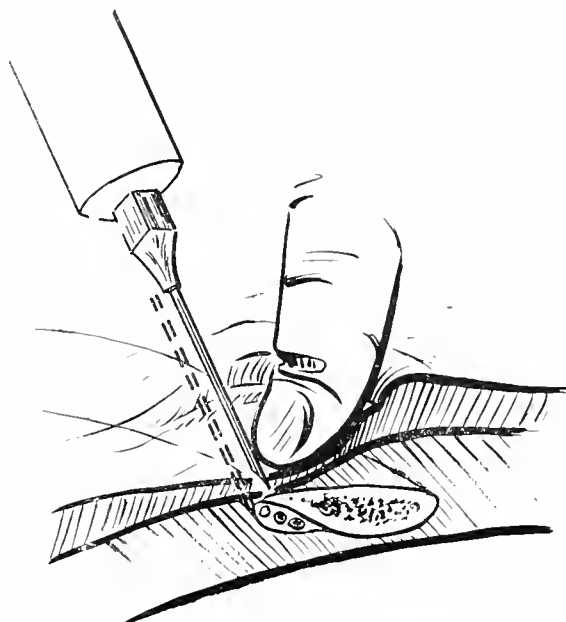


Figure 2.

The index finger of the anesthesiologist's free hand pulls the skin wheal over the rib. The needle is then inserted through the skin and subcutaneous tissues until the rib is contacted. Note the thickness of the rib and that the neurovascular bundle is beneath the lower edge of the rib.

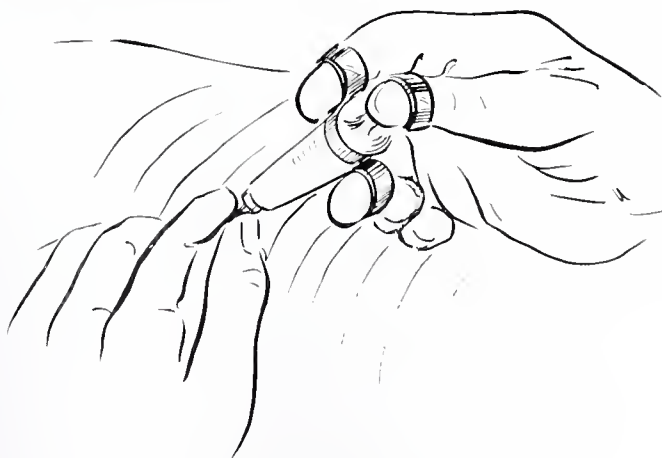


Figure 3.

Once the rib is contacted, the anesthesiologist grasps the hub of the needle. He then carefully "walks" the needle down the rib until he just loses contact with the rib and "pops" through the membrane that encloses the intercostal artery, vein, and nerve.

Then the anesthesiologist advances the needle 2 mm and with slight constant motion of the needle injects 5 ml of the anesthetic solution. Slight constant motion of the needle is used to prevent the inadvertent intravascular injection of the anesthetic solution.

Using a 4, 5, or 6 inch security-bead needle, depending on the size of the patient, the anesthesiologist inserts the needle perpendicularly in all directions through the skin wheal of the last rib, being careful not to spring the needle by supporting in the center with the thumb and index finger of the left hand. Once through the skin, the point of the needle is aimed along one side of the triangle and toward the anterior of the surface of the twelfth vertebral body and carefully advanced. When the body of the vertebra is contacted, the needle is withdrawn and redirected so that it will just pass by the vertebral body, and it is then advanced approximately one-half inch. The point should now lie in the areolar tissue that supports the celiac plexus. If bloods flows from the needle, it is withdrawn until the bleeding stops or the needle is repositioned.

When the anesthesiologist is satisfied with the needle's position, he rests his left hand on the patient's back and firmly grasps the hub of the needle, attaches the syringe to the needle, and injects 25 ml of solution. Resistance to the flow of the solution should feel like that of the bore of the needle and no more. This is repeated on the opposite side.

Complications

In addition to the possibility of an intravascular injection, i.e., a toxic reaction to the local anesthetic drug, both the celiac plexus block and the intercostal block do have complications associated with them. According to Moore, regardless of the ability of the anesthesiologist, the kidney or the abdominal viscera will on occasion be punctured by the needle. Nevertheless, "blood urine, peritonitis, or hemoperitoneum from a celiac plexus block has not been seen [by Moore in his practice] or noted in the literature."

Although pneumothorax is a possible complication of an intercostal nerve block, if the anesthesiologist pays strict attention to detail in its execution and uses the thickness of the rib as his guide to the maximum depth of insertion of his needle after he pops through the intercostal

membrane he should have no fear of puncturing the visceral pleura and causing a pneumothorax. In practice, the needle point is advanced through the thickness of the rib. Herein lies the safety of the technique.

If a pneumothorax is diagnosed and it is 20 percent or less, the patient is observed, reassured, given analgesics for discomfort, and warned not to exert himself. He is followed with appropriately spaced chest X-rays until re-expansion is assured. If the pneumothorax is larger than 20 percent, the air should be removed. Oxygen is used if dyspnea occurs and analgesics for any associated discomfort. Then the patient is put at bed rest, observed, and reassured.

Summary

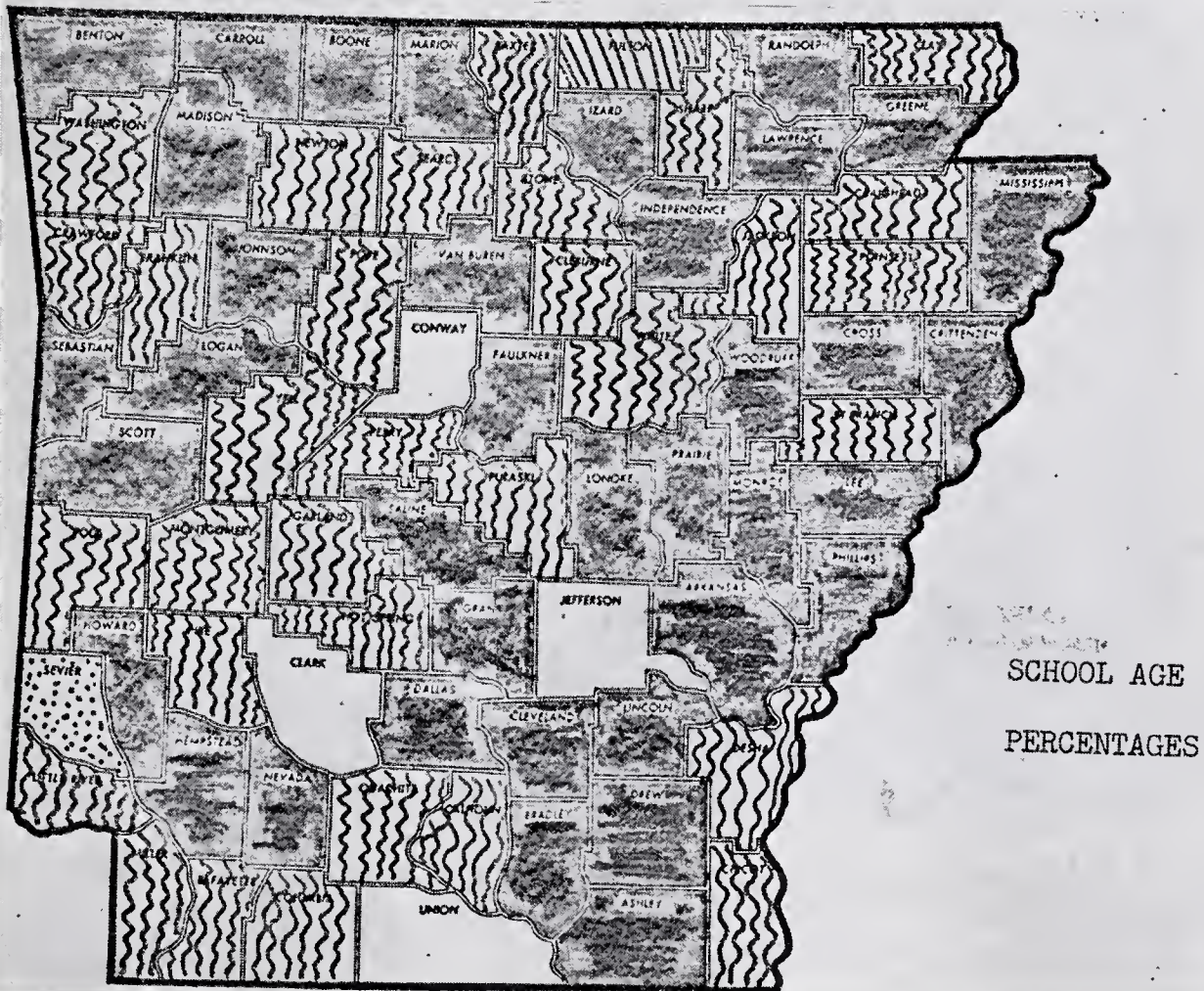
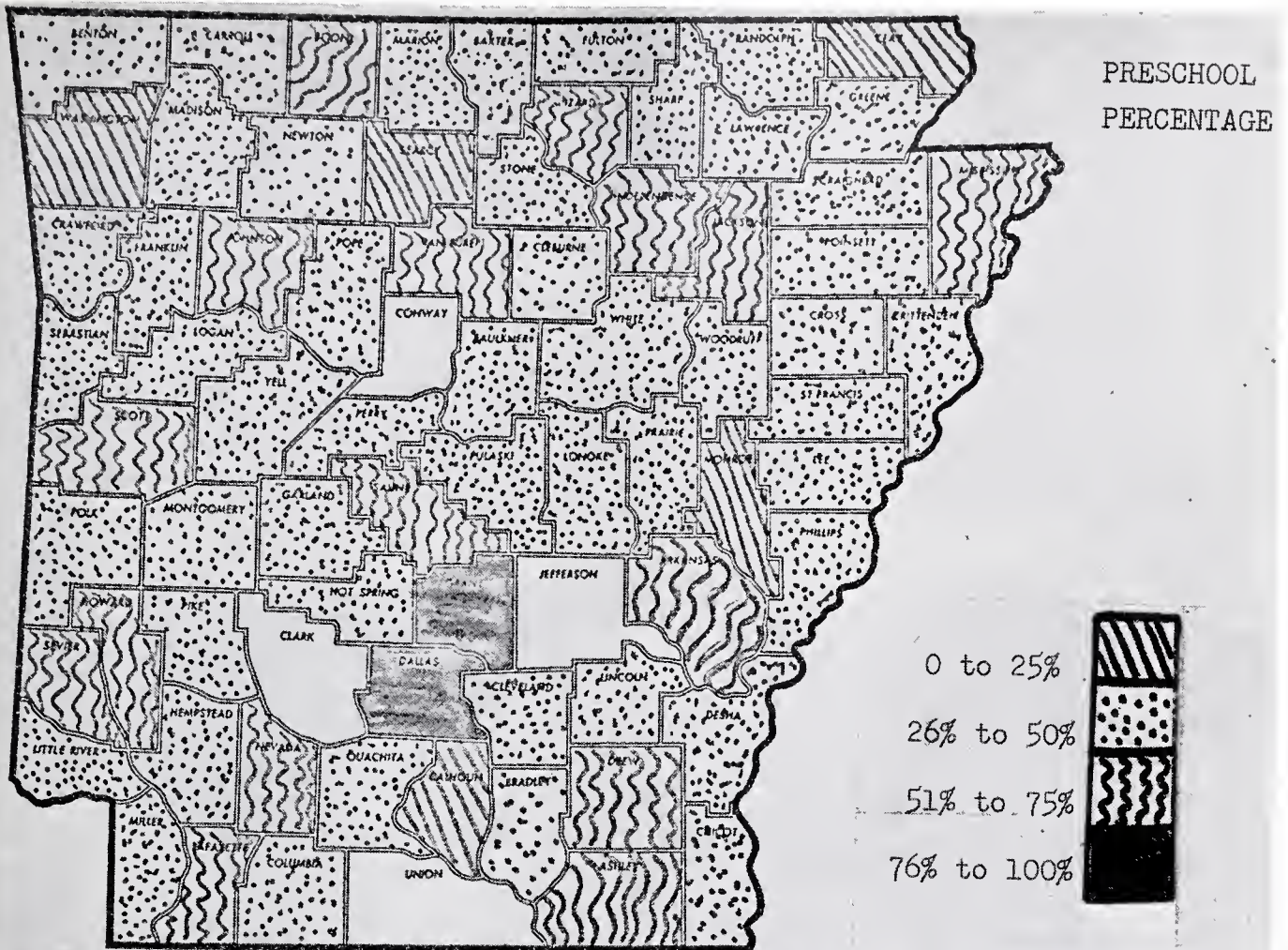
The two paramount criteria for the selection of an anesthetic regimen for abdominal surgery in the poor risk patient are: One, the regimen must not interfere with the adequacy of the patient's tissue perfusion; and, two, the regimen must not destroy any of the patient's compensatory mechanisms. In addition, the anesthesiologist must anticipate the postoperative effects of the anesthetic regimen. Before anesthesia can be induced, the patient must be impeccably prepared for surgery and anesthesia.

An intercostal-celiac plexus block fulfills the above criteria. In selected cases, the celiac plexus can be omitted. To either regimen may be added light general anesthesia and endotracheal intubation. In this clinic, we feel that the flexibility of the intercostal-celiac plexus block affords both the patient and the surgeon maximum benefits.

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TABLE ONE			Poor-risk Individual
Maximum Safe Dose			
	mg/kilo	mg	
lidocaine	7	500	250 to 375
mepivacaine	7	500	250 to 375
procaine	15	1000	500 to 650





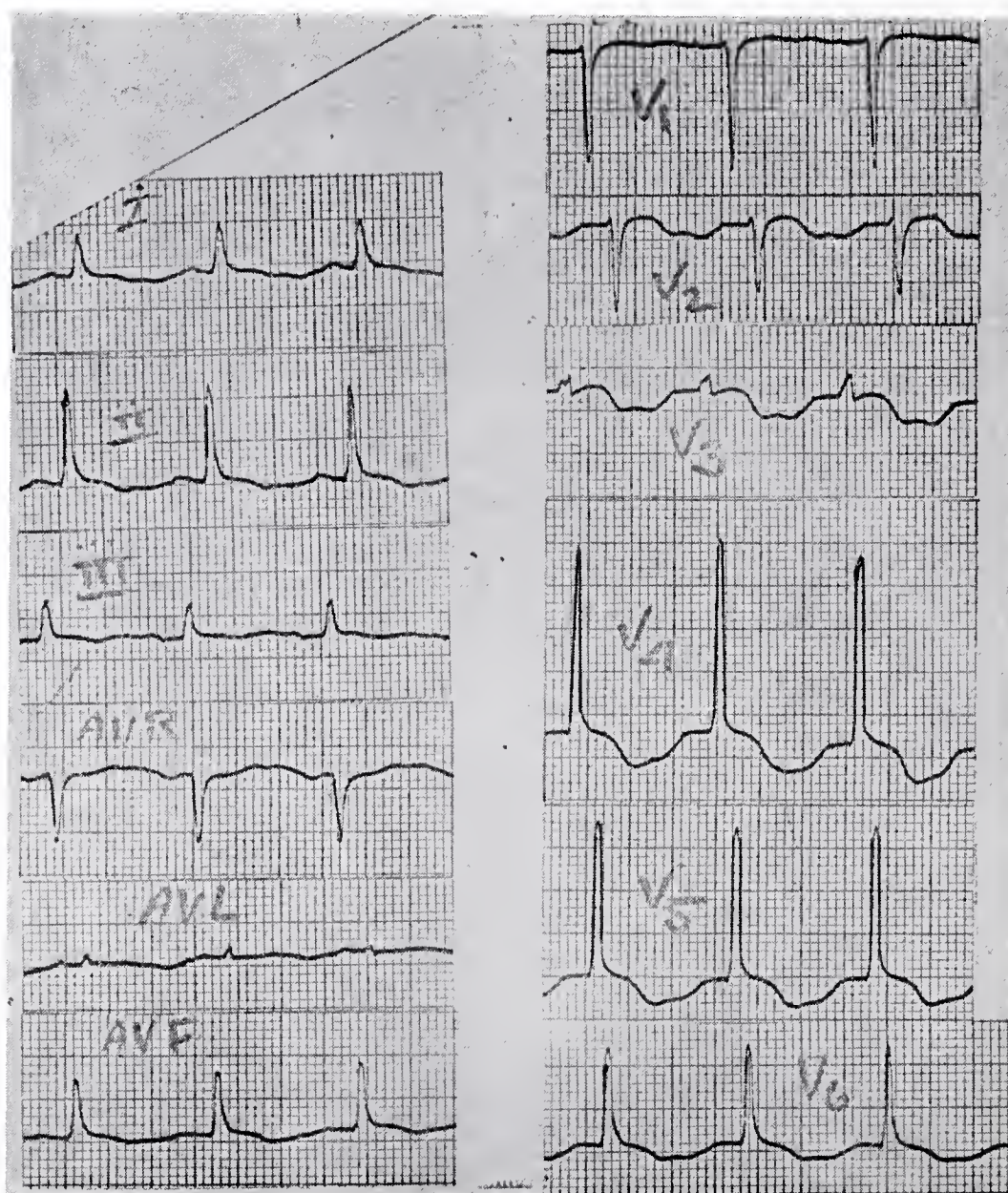
ELECTROCARDIOGRAM

OF THE MONTH

• • • • •

This is a 47-year-old white female with gangrene of the right foot. The patient is on no digoxin or diuretic; taking Thorazine 500 mg. T.I.D. and Stelazine 5 mg. daily.

(See Answer on Page 285)



The Department of Cardiology, University of Arkansas Medical Center
John E. Douglas, M.D.



EDITORIAL

The Eyes of Argus

F. E. Greifenstein, M.D.*

"... I storm the thick, sweet mystery of chloroform the drunken dark, the little death in life."

William Ernest Henley (1849-1903)

"Doctor, your patient is ready." With these words a new band entered the spectrum of medicine. Through the efforts of Wells, Morton and Crawford Long the dread pain accompanying the surgical process could now be abolished. Successive accomplishments over the next century enabled the surgeon to advance his pursuits in a patient environment free from anxiety and fear. Nitrous oxide and ether gave way to the non-flammable fluorinated compounds, profound muscle relaxation could be achieved with curare and regional anesthesia was possible with newer longer acting less toxic drugs.

While the primary goal of the anesthetist was—and still is—to establish a pain free experience for the surgical patient he has in this pursuit recognized the many factors and modalities that enter into the care and preparation of the surgical patient. In this regard the contributions of anesthesia have been many and significant. In recent times, however, the anesthesiologist has looked beyond the operating room, into intensive care, cardiac care, respiratory care, and inhalation therapy, and acute medicine. Pharmacology, long one of the bases for anesthesia, is now translated into clinical pharmacology where modern anesthesiologists have an important role in elucidating the actions of old and new drugs in man. The changes wrought upon the physiologic balance both by disease and by the anes-

thetic process have necessitated a thorough and fundamental understanding of the physiologic and biochemical phenomena. No longer are we content to talk of "lipid solubility" as an end point of anesthetic action, but rather are not satisfied until one can discuss the actions of anesthetics in terms of mitochondrial enzyme activity, cellular and molecular function and ion transfer.

No organ system, no cube of tissue is sacrosanct. While the principle concerns of the anesthesiologist must rest upon the cardiovascular, pulmonary and nerve systems other parameters assume no less importance. Much attention of late has been focused upon the liver, the kidney, the endocrine systems and the effects of the anesthetic management on these various systems. The anesthesiologist today might well be called the "biological systems analyst" as he correlates alterations in the patient's physiology with the modalities he has at his command in the management of the life support systems within and without the operating room.

No better example of the broad spectrum of anesthesiology can be had than the articles in this issue of the Journal. Problems of fluid balance, the newborn infant, the resuscitative procedures in children and regional anesthesia indicate the wide interest and knowledge of today's anesthesiologist. These are but a few of the areas explored today. Anesthesia is of age, assuming its place in the total health scheme of good patient care. It has come a long way from the "Ether Dome."

*Professor and Chairman, Division of Anesthesiology, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

MEDICINE IN THE



THE MONTH IN WASHINGTON

With the exception of House-Senate conference resolution of legislation designed to step up the nation's efforts to find a cure for cancer, the 92nd Congress' activity in the area of health legislation in this session has probably ended.

Senate consideration of the Social Security Amendments (Medicare and Medicaid changes) has been postponed until after the first of the New Year and the House Ways and Means Committee hearings on national health insurance have come to a halt after six grueling weeks and executive sessions will not be scheduled until early 1972.

The House approved 350-5 an expanded \$1.6 billion cancer research program within the National Institutes of Health. The bill differs from a Senate measure which provided that the head of the National Cancer Institute report directly to the White House, by-passing the NIH director. Under the House bill, the Cancer Institute head would be elevated to Associate Director of NIH and the cancer budget would be handled separately by the President's Office of Budget and Management. A House-Senate conference must now determine how to reconcile the important organizational differences in the measures.

The Senate's reluctance to come to grips with the Social Security Amendments of 1971—unfinished business in the last session of the previous Congress—has been attributed to wide disagreement among members as to how to proceed with that portion of the proposed legislation that would establish a new family assistance welfare plan.

On the positive side, however, with respect to the 92nd Congress' attention to health matters is its success with legislation designed to sharply increase the training of physicians, nurses, and other medical personnel.

On signing this legislation, President Nixon called on Congress to appropriate \$350.2 million in additional funds to pay for the program for

the rest of the fiscal year that runs through June 30, 1972.

The measure provides grants to medical schools and nursing schools to help finance additional construction and to encourage the enrollment of additional students. It also provides loans and grants directly to medical and nursing school students.

Dr. Merlin K. DuVal, assistant HEW Secretary for Health and Scientific Affairs, said the nation faces a shortage of 50,000 physicians and as many as 200,000 nurses by the end of this decade unless action is taken.

DuVal said the legislation could increase by about 1,200 first year enrollment of physician candidates in medical schools next year, a ten per cent increase in the first year places.

DuVal predicted that if HEW law is adequately funded each year it could eliminate the shortage of physicians by 1980. He said he was unable to make a similar prediction concerning the nursing shortage.

* * *

The American Medical Association's testimony before the House Ways and Means Committee hearings on national health insurance attracted for one of the few times during the marathon sessions most of the Committee members, though Chairman Wilbur Mills was away on the campaign trail.

The AMA urged adoption of its national health insurance proposal—Medicredit—as a program that “can be put into operation now.”

The AMA proposal, which offers both basic and catastrophic coverage for all Americans not covered by Medicare, was set forth in testimony before the House Ways and Means Committee by Dr. Max H. Parrott, Chairman of the AMA Board of Trustees, and Dr. Russell B. Roth, Speaker of the AMA House of Delegates.

“I do not want to suggest to this Committee that our present system of health care is perfect. It is not. It needs modification and change. And it will serve people better with the kind of gov-

ernment supported health insurance we propose in our Mediredit bill," Dr. Parrott told the committee.

"It (Mediredit) avoids the mistake inherent in proposals such as H.R. 22 (the Kennedy-Labor bill), which would lock medicine into a rigid, monolithic, no choice, bureaucratic system before there is any real evidence that it would make things better," he said.

In contrast to H.R. 22, Dr. Roth stated, Mediredit builds upon outstanding accomplishments of American medicine "which has shown a capability of being the best in the world."

"And it can be put into operation now. It has no dependence on untried theory or dubious economics. It does not require an unreasonable expenditure of federal dollars and it does not jeopardize the funding of other vitally necessary programs to improve the nation's health. It places emphasis on greater financial support for persons needing this assistance. It does not create an unreasonable, unrealistic and burdensome administrative bureaucracy," Dr. Roth added.

The AMA Mediredit proposal, whose 160 sponsors in Congress are the most for any national health insurance proposal, would provide both basic and catastrophic coverage for all Americans under age 65. (Medicare would continue for all those over 65). It is based on a system of tax credits with the government paying the cost for those who have little or no income. The government would also pay the premiums on the catastrophic coverage for all citizens. (The AMA estimates Mediredit would cost about \$14 billion a year. H.R. 22 would cost at least \$60 billion a year in new tax money, according to a recent study by the Department of Health, Education and Welfare).

Under its basic coverage, Mediredit provides comprehensive benefits in respect to hospital inpatient and outpatient services, as well as full physician services. Its catastrophic coverage includes full hospitalization and additional extended care, with a continuation of outpatient services and full physician services.

"It puts these benefits within the reach of all Americans under age 65 as a prepaid insurance package," Dr. Roth told the committee. "The benefits are uniform for all citizens under the program. For those with little or no income the cost would be borne by the federal government from general revenues. For those with a capa-

bility to pay part of the costs, the program is realistically geared to encourage them to do so. The motivation for participation would, we believe, be especially strong because of our incorporation of tax credits."

Dr. Parrott, in his testimony, drew the attention of the committee to many achievements in American medicine:

"Those who criticize our system of medicine imply that it is static and must be replaced. Let me call your attention to some of the salient accomplishments of our pluralistic medical system. Accomplishments that are obscured in the radical chic, by a disaster lobby which stridently proclaims a need for revolutionary change.

"Probably our highest achievement is in the quality of medical care in this country. The world standard of medicine is here in this country. American medical schools produce men and women with the best medical education there is. Our technology is unsurpassed. The ranks of allied health manpower continue to grow in terms of both size and sophisticated training."

Dr. Parrott cited the 25 per cent drop in the nation's infant mortality rate in the last decade and the steady growth of life expectancy in the U.S. as evidence "that American medicine—our pluralistic, evolving, pragmatic system—is changing things for the better, that we *are* making progress."

American medical schools, Dr. Parrott noted, have increased from 89 in 1967 to 108 this year and first-year enrollment has grown from 9,000 to 12,000 students. The number of new physicians each year exceeds 8,000 due in part to "an almost revolutionary telescoping of the traditional medical education." This means, Dr. Parrott said, that the physician population is growing at a rate "more than double" the general population rate.

Organized medicine has also undertaken initiatives to bring medical costs under control, Dr. Parrott told the committee. This is being accomplished mainly through medical society foundations, based on the concept of peer review, which screen hospital admissions and review medical procedures.

"On balance, we have a medical system with impressive accomplishments, a system that is flexible and innovative, a system responsive to the need for change and improvement. In whatever action this committee chooses to take the

American Medical Association strongly urges that you build on the very real strength that now exists," Dr. Parrott concluded.

* * *

The American Hospital Association told the House Ways and Means Committee hearings on national health insurance that its *Policy Statement on the Provision of Health Services* provides a direction for national health policy and serves as the basis upon which the Committee can frame goals and programs for the nation's health care.

Jack A. L. Hahn, the AHA's president, told the committee that once goals and priorities have been set, "what needs to be done is to embark immediately on a rationally-staged program within an overall framework of established goals and objectives. Government must take the lead in providing the framework for required changes."

Later in his testimony Hahn said:

"The AHA program has been drafted as a legislative proposal, however, the initial draft is being restudied and revised by the Association. The bill-drafting process showed that simple and readily attainable solutions to complex problems do not exist". Hahn added that the Association had not come with a legislative proposal for consideration by the Committee, but with "recommendations that can be taken now and that can serve as building blocks for the attainment of much broader goals for the system."

* * *

Elsewhere on Capitol Hill, the AMA told the Senate Health Subcommittee headed by Senator Edward Kennedy that is now exploring the feasibility of Health Maintenance Organizations that "the concept of the HMO has not yet been tested."

"Our strong recommendation is that we find out whether economics can be achieved before such a major commitment is made," declared John R. Kernodle, M.D., vice chairman of the AMA Board of Trustees.

Stressing that the AMA supports and encourages further experimentation with HMO's, Dr. Kernodle said "HMO's are just one form of health care delivery and no one knows at this time just what impact they will have or how successful they will be in universal application."

With reference to the Nixon Administration's announced goal to make HMO's available to 90

per cent of the population within a decade, Dr. Kernodle said:

"To us, (AMA) this is an open-ended commitment. Because of the many unknown factors regarding HMO's we feel it is a rather dangerous blank check for the Congress to issue. For any time you are talking about a program that will affect 90 per cent of the people, you are, in fact, inaugurating a new medical system. It would seem to be the better part of wisdom to be certain of all the facts and cognizant of all pitfalls before embarking on such a course."

Clinton S. McGill, M.D., vice chairman of the AMA Committee on Private Practice, told the subcommittee that less than four percent of the population—generally only highly selective parts of the population—is served by prepaid group practices. "There is little experience with high-risk segments of the population. This, in our opinion, constitutes too narrow a base upon which to construct a new universal system."

* * *

President Nixon has appointed a 21-member Committee on the Health Services Industry to oversee inflation in health care costs as part of the Phase 2 economic program. Chairman of the advisory group is Mrs. William C. Dunn, Commissioner of the Department of Consumer Protection for Connecticut.

The Administration intends to cover physicians' services as well as those of all other providers of services in the cost control effort, but the manner in which this will be carried out has not yet been established.

While the government obviously can control to some extent payments in federal programs such as Medicare, especially for hospitals, regulating physicians' fees in the private sector is something else again. Apparently, a major thrust of the Phase 2 program as it affects physicians will be to urge voluntary compliance.

The Administration's aim is to keep charges from rising to a point where the unit profit is higher than it was in the past. Fee rises stemming from higher costs of doing business will be okay as will a certain percentage to take into account general rises in the cost of living.

The lack of a penalty-backed policing role by the government—at this date anyway—might seem to make the federal program toothless. But Administration officials are confident that public concern and public and peer pressures will make

it difficult for individual physicians to hike fees substantially. Furthermore, the Administration is certain that most physicians are willing to cooperate.

Four physicians are on the panel, which also includes representatives of state and local government, consumers, hospitals, related health occupations and industries and the health insurance companies.

Physician members are: William Lotterhos, M.D., President of the American Academy of General Practice and former chairman of the AMA's section on General Practice; James Haviland, M.D., former acting dean of the University of Washington School of Medicine; Earl Brian, M.D., Director of the California Department of Health Care Services; and James Cowan, M.D., Commissioner of Health for the state of New Jersey.

C. Joseph Stetler, President of the Pharmaceutical Manufacturers Association and former General Counsel for the AMA, is also a committee member.

* * *

The decision of HEW to kill the Public Health Service's Commissioned corps is sure to fan congressional interest in a separate department of health.

HEW Secretary Elliot Richardson said he was adopting a special advisory commission's recommendation of last summer that the corps—composed of 5,500 physicians, dentists, engineers, nurses, pharmacists, veterinarians—be phased out and replaced with a civilian system.

While this would solve a serious internal personnel problem at HEW, the move does nothing to further Richardson's relations with Congress which has had a soft spot for the PHS Corps for many years.

Until recent years, the corps functioned as a semi-autonomous unit at HEW, with the PHS Surgeon General reporting directly to Congress, thus to some extent bypassing higher authorities at HEW. A close liason with Congress was built up and still lingers on, hence the outcry when the Administration recently moved to close down PHS hospitals.

The reorganization of HEW carried out under HEW Secretary John Gardner firmly placed the secretary and assistant secretaries in control of the agency's health programs and diluted the

powers of the Surgeon General to the extent that they are now difficult to define.

However, memories of the old days when Congress was able to call the shots at PHS remain strong and are one reason why such influential men as Rep. Paul Rogers (D., Fla.) are set on establishing a separate, cabinet-level department of health. The reasoning is that only this would give Congress the power it seeks over how the federal government administers its huge health empire.

SUMMARY OF ACTIONS OF THE HOUSE OF DELEGATES, AMERICAN MEDICAL ASSOCIATION, NOVEMBER 1971

Actions which were not only significant, but historical, were taken by the House of Delegates at the Clinical Convention. They included creation of a special section for medical students, and one for interns and residents; ordering open hearings at the two 1972 conventions to explore questions relating to AMA organizational structure and programs, questions raised by AMA President Wesley W. Hall last June in Atlantic City and again in New Orleans; approving a vote on the Board of Trustees for the AMA vice president; approving participation of non-members of the AMA in AMA scientific programs, and directing that the AMA lead in developing a national program for certification of the assistant to the primary care physician.

The House met for a total of 9 hours and 42 minutes. It acted on two special reports; 20 reports from the Board of Trustees; 8 from the Council on Medical Education; 4 from the Council on Medical Service; 2 from the Council on Constitution and Bylaws, and 1 each from the Judicial Council and Council on Long-Range Planning and Development, plus 72 resolutions.

If one prevailing mood of the House had to be described, it would appear to be one of wanting to move forward, and at the swiftest possible pace.

Medical Students

No less than five items of business—Report I of the Board of Trustees and four resolutions—concerned this subject, reflecting the intensity of interest. These items were studied by a reference committee and a substitute resolution was offered in lieu of all of them—referring the matter to the Board for study of mechanisms to include students in the organizational structure.

But the House rejected the move. It adopted instead an amended resolution on motion of the California delegation. This measure approved "creation of a special section for medical students and a section for interns and residents." It directed that the Council on Constitution and By-Laws "develop appropriate language to accomplish this purpose," working with representatives of the Student American Medical Association and representatives of the interns and residents. The long-heard appeal of students and younger physicians for a voting voice in the AMA was thus answered.

President's Address

AMA President Wesley W. Hall, saying, "our House of Medicine is sorely in need of some major repairs," repeated his call for a constitutional Convention, or other appropriate procedure, for a basic review of organizational structure and programs. He first suggested such a convention upon his inauguration last June.

Dr. Hall said that since that time he had traveled throughout the nation and heard from physicians "hundreds of unsolicited views on medicine in general, on problems they are encountering in their practice and on our stewardship of the AMA."

"Frankly, I am troubled and disturbed by what I see and hear," Dr. Hall told the House, "and I am more convinced than ever that we need a basic review of our Association's organizational structure."

He did not envision "a study that will continue over a period of years and years and become bogged down in trying to anticipate problems and programs of the distant future. We all recognize the need for long-range planning, but my concern calls for more immediate action."

Dr. Hall said he was disturbed by a number of things, including losses in membership, association finances and a decrease in attendance at annual and clinical meetings.

He also said, "We simply have too many programs. Some have outlived their usefulness. Others are of considerable value in these times. Still others should be pruned."

He called for employment of the consulting firm of Cresap, McCormick & Paget, which did a study for the AMA in 1968, to do another survey on AMA operations.

The president also called for closer liaison with specialty societies; suggested the AMA should

sponsor only national and international congresses on general subjects, rather than its traditional meetings, and said it may be time to consider reorganizing the association as a "for profit" corporation or service corporation.

Dr. Hall's address and Resolution 50 which also called for organizational review, were studied and discussed in reference committee. The committee also studied two reports dealing with the question of a Constitutional Convention, from the Councils on Constitution and Bylaws, and Long Range Planning and Development, both of which recommended against holding a Constitutional Convention.

The reference committee "reappraised itself of the 1968 management report" of Cresap, McCormick and Paget. Upon completion of Phase I of that study, "the Board of Trustees, of which Dr. Hall was a member, terminated the study and the action was approved by the House of Delegates in December, 1969. Your reference committee concurs in this decision."

There is continuous review and evaluation of AMA structure and programs, the committee said.

"Changes in the Constitution and Bylaws at every meeting bear this out. Recent changes in membership provisions with respect to interns and residents, as well as current changes in the status of medical students and voting powers of the vice president are prime examples."

The committee said the Council on Long Range Planning and Development was an appropriate mechanism for reviewing structure and programs, and to serve as a focal point for planning activities.

The panel said it believed the Board of Trustees was "vigorously pursuing" the problem with membership and that the President's concern about AMA involvement in scientific matters "will be alleviated by recent changes in the Constitution and Bylaws establishing Section Councils which will become operative in 1972."

Many of the problems faced by medicine come from social unrest and are common to all society, the committee said. It said Dr. Hall, "in his tireless efforts in appearances throughout the country, has seen this unrest and is to be commended for bringing this to the attention of the House of Delegates."

The House accepted the committee's recommendation to refer Dr. Hall's remarks and Resolution 50 to the Council on Long Range Planning and Development. But it also called for specific procedures to be instituted by the Council.

This came in an amendment from the Wisconsin delegation, whose spokesman said it came to the convention "with a mandate to seek a constitutional convention or some type of meeting to effect organizational changes." The amendment instructed the Council to hold open hearings for the membership in San Francisco in June, 1972, and in Cincinnati in November, 1972, and provide the House with progress reports and a summary report on its recommendations and findings in June, 1973, in New York.

Vice President

There was overwhelming support for Resolution 55, to give the vice president of the AMA voting privileges on the Board of Trustees, and the measure was quickly adopted by the House. Presently, the vice president attends Board meetings, with the right of discussion but no vote. The action would increase the size of the Board from 15 to 16 members. Although the House vote had the effect of amending the Bylaws, a Constitutional change is necessary, and the matter was referred to the Council on Constitution and Bylaws. Even as discussion continued before the House, the Council came up with the necessary proposed amendments, clearing the way for final action in the annual meeting in June, 1972.

Non-Member Participation

The House amended the Bylaws to permit those physicians who are not members of the AMA to participate in AMA scientific programs as "invited guests." The recommendation came from the Board of Trustees, which said the programs should be available to all members of the profession. The Board report said "non-member physicians, eminent persons from foreign countries, and residents of the United States who are not engaged in the practice of medicine" may be invited to participate.

Dues for Interns and Residents

The House established annual dues of \$20 for interns and residents as members of the AMA. The amount was calculated "solely to cover some of the costs of the benefits of membership," such as receiving AMA publications. Interns and residents currently may join the AMA in two ways:

Through active membership in a state association or, where there are no provisions for such membership, by direct application to the AMA. In either case, they must pay the \$20 AMA dues.

Physicians' Assistants

Several major actions were taken in regard to the rapidly developing field of physicians' assistants.

The House directed that the AMA, through its Council on Health Manpower, "assume a leadership role in developing and sponsoring a national program for certification of the assistant to the primary care physician, who functions at the highest level of responsibility described by the National Academy of Sciences as a 'Type A' assistant."

Delegates also adopted a report of the Council on Medical Education, outlining essential requirements for AMA approval of educational programs for such assistants. The essentials were developed in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians and the American Society of Internal Medicine.

Essentials of an approved educational program for urologic physicians' assistants, outlined in another Council report, went back to the Council for further study.

The House directed the Board of Trustees to develop guidelines on compensation of physicians for the services of their assistants, and to report back to the House next June.

Hospital Costs — Education Factors

The rising costs of hospital care, and those cost factors attributable to hospital-based education programs, also drew House attention and action. Delegates adopted a resolution which reiterated AMA concern about increasing costs and pledged AMA efforts to achieve cost control, and added:

"Resolved, that the Board of Trustees be urged to assign to appropriate councils and committees the responsibility to conduct a detailed study of the costs of hospital services to identify (1) the multiple factors involved; (2) the elements that have the greatest impact on the rise in hospital costs; (3) the various cost factors attributable to hospital-based medical and allied health education programs; (4) the alternative mechanisms to finance the costs of such educational programs including the possibility of reducing or elimi-

uating charges to patients that are attributable to such programs; (5) the degree of impact, if any, that federally funded health programs have on these hospital costs."

The resolution called for the study to be conducted in consultation with the American Hospital Association, private and governmental payment agencies, and representatives of the public. Periodic progress reports, to be submitted at each session of the House of Delegates until completion of the study, also were requested.

Miscellaneous

Immediate action to improve the quality of emergency medical services in the United States was urged in a Board of Trustees report adopted by the House. The report said:

"Those medical societies that have not already done so are urged to establish councils on emergency medical services or to assign that subject area to an appropriate existing council, whose responsibility should include developing action programs in emergency medical services to meet their area's needs and maintaining liaison with groups at all levels of organized medicine concerned with emergency medical services."

Small communities without necessary resources to develop their own systems "should consider linking together with surrounding communities to form a regional system." Skilled personnel and high quality equipment and facilities should be provided, the report said, and the medical profession should see to it that quality of service is periodically evaluated. The report also recommended a single agency at the federal level with responsibility for all governmental efforts to improve emergency medical services.

A revised statement on the scope, objectives and functions of occupational health programs also was adopted by the House. The statement, among other things, said "some employees on occasion may find it impossible to locate or to obtain the services of a personal physician or health service. In such circumstances, limited to where treatment is otherwise unavailable, the occupational physician may undertake additional and continuing treatment of an employee's non-occupational condition if requested to do so by the employee or his family."

The statement added that if such services become ongoing within the occupational health program, approval of the employer should be obtained. "In order to assure high quality medi-

cal care, consideration and approval by the local medical society in developing such projects, including the methods of payment for services, is urged."

The House adopted a study on Community Health Delivery Programs and urged it be given wide distribution. The study, by a task force of the Committee on Community Health Care, described funding, scope of operations and staffing of 30 programs around the nation.

Physicians should be active, the report recommended, in a number of areas including: participating in planning and operation of community health programs; using all means at their disposal to ensure that all people are afforded equal access to adequate medical and health care; supporting campaigns against factors harmful to health such as lead poisoning, drug abuse and poor housing; and supporting health education programs in schools, homes and the mass media. The federal government should be urged to consolidate all federal health programs under one department and to provide long-range approval and multiple-year funding—rather than annual funding—to help retain top staff, the report said.

Awards

Milton Helpern, M.D., the noted chief medical examiner for New York City, was chosen by the House to receive the AMA Distinguished Service Award for 1972. It will be presented at the annual convention in June, 1972, in San Francisco. Dr. Helpern earned his M.D. from Cornell University Medical College in 1926. Following his internship and a pathology residence at Bellevue Hospital in New York, he became an assistant in the office of New York City's chief medical examiner. He became chief of the department in 1954. Dr. Helpern, author of a book and numerous articles, is professor of pathology and chairman of the department of forensic medicine at New York University School of Medicine.

Mac F. Cahal, J.D., executive director of the American Academy of Family Practice for nearly a quarter of a century, received the Layman's Citation for Distinguished Service. Mr. Cahal, an attorney, retired last month from the Academy, now known as the American Academy of Family Physicians. But he continues to serve as its general counsel. The nomination described him as having "implemented ideas which have contributed greatly to American medicine on every level and in every area open to him."

Dr. J. T. Herron Commended

At the direction of the Executive Committee of the Arkansas Medical Society, the following letter was written to Dr. J. T. Herron upon his retirement from the Arkansas State Department of Health:

December 7th, 1971

Dear Dr. Herron:

The Executive Committee of the Arkansas Medical Society noted with regret newspaper reports of your resignation as State Health Officer.

Your long service as Chief of the Health Services of this State has been marked by progress, honesty and an evenhanded administration of the laws protecting the health of the people of Arkansas.

The friendship and respect of the physicians of this State go with you wherever you choose to pursue your career.

We wish you continued success.

Please call on us if the Arkansas Medical Society can be of any assistance.

Very truly yours,

Paul C. Schaefer
Executive Vice President

* * *

December 16, 1971

Dear Mr. Schaefer:

Thank you for your letter of December 7, 1971.

My long tenure as State Health Officer has afforded me an opportunity to work with many fine people in both official and voluntary agencies. This has been a rewarding experience and I am especially grateful to the physicians of the State of Arkansas for their wholehearted cooperation and all of the help that they have given me throughout the years.

With best personal regards to all of you,
I am

Very truly yours,

J. T. Herron, M.D.

Cepacol Removed From "Ineffective" List

Both Cepacol Mouthwash/Gargle and Cepacol Throat Lozenges, as now labeled, are deemed safe and effective drugs by the Food and Drug Administration. The Federal Register of December 2, 1971, carried notices to this effect. As a result, both drugs have been moved to the Effective section of the FDA's Index to the Federal Register Decisions for NAS/NRC Reviewed Drugs. The Armed Services are restoring both products to the Federal Supply Catalogue.



PROCEEDINGS OF SOCIETIES

Craighead-Poinsett

At its regular meeting in November, the Craighead-Poinsett Medical Society passed a resolution asking physicians to voluntarily abstain from prescribing amphetamines to patients. A spokesman for the Society said the resolution was passed as part of an effort to combat the drug problem in that area. The resolution does not call for an end to prescribing amphetamines to patients with narcolepsy, or to children with a hyperactive condition or brain damage.

Long-Term Parenteral Nutrition Through an External Arteriovenous Shunt

M. E. Shils et al (424 E 68th St, New York 10021)
New Eng J Med 283:341-343 (Aug 13) 1970

An arteriovenous shunt with a side arm was used for the intravenous feeding of a patient who had bowel resected from the third part of the duodenum to the ascending colon and who could no longer be maintained by indwelling venous catheters. The nutrient solution was prepared in plastic bags by a procedure that minimizes contamination and permits preparation and administration at home. Infusion is given in a period of nine hours or less, employing a special pump, filter, and valve. The patient has been maintained in good nutritional status by this means for many months.



PERSONAL AND NEWS ITEMS

Physicians Reappointed to AMA Committees

Dr. Ernest B. Howard, Executive Vice President of the American Medical Association, recently announced the reappointment of three Arkansas physicians to AMA committees. Dr. C. C. Long of Ozark was reappointed to the Council on Rural Health; Dr. James L. Dennis of Little Rock was reappointed to the Council on Scientific Assembly; and Dr. Joseph A. Norton of Little Rock was reappointed to the Committee on Medicine and Religion.

Physician's Medical Bag Stolen

Dr. Oliver Wallace's medical bag was stolen from his car in December. The theft occurred in the afternoon while the car was parked at the clinic in Green Forest. Drugs and syringes were removed from the bag and the bag was discarded on the clinic grounds.

Members' Articles Published

The December issue of the Southern Medical Journal featured two articles submitted by Little Rock physicians. The articles are: "Resuscitation of the Newborn as It Relates to Number and Training of Available Personnel," by Dr. Richard B. Clark, and "Avulsive Injuries to the Heel," by Dr. James G. Stuckey.

Dr. Rasch Honored

Dr. James R. Rasch of Little Rock was elected to a second three-year term of office as a member of the Board of Governors, American College of Chest Physicians, at the annual meeting of the College in Philadelphia in October. Dr. Rasch represents the members of the American College of Chest Physicians in Arkansas.

Physician Receives Certificate of Achievement

Dr. Anthony DePalma of Fayetteville was presented a Certificate of Achievement for his support of the Army Reserve Officers Training Corps program at the University of Arkansas. The presentation was made on November 30, 1971, when the Army ROTC unit at the University honored cadets and officers. Dr. DePalma is a lieutenant colonel in the Army Reserve.

Physicians Re-elected to AAFP Membership

The following Arkansas physicians have been re-elected to active membership in the American Academy of Family Physicians: Drs. Kemal Kutait and Kenneth Lilly, both of Fort Smith; Dr. C. C. Long of Ozark; and Dr. E. N. McCollum of Decatur.

Dr. Regnier Honored

Dr. W. A. Regnier of Crossett was honored by an "appreciation dinner" on January 7th. The dinner was given for Dr. Regnier by his friends and fellow citizens of Crossett, who wanted to show their appreciation for the many years of service he has given them. Dr. Regnier began practicing in Crossett in 1939.

Physicians Elected

Physicians who have been elected to head staffs of the following hospitals for 1972 are:

St. Joseph's Hospital, Hot Springs. Dr. Haynes G. Jackson, chief of staff; Dr. Stuart B. McConkie, vice-chief and chief-elect.

Crittenden Memorial Hospital, West Memphis. Dr. Lee Winters, chief of staff; Dr. T. Murray Ferguson, chief-elect; Dr. Donald F. Thompson, secretary.

St. Vincent Infirmary, Little Rock. Dr. Deane D. Wallace, chief of staff; Dr. Bill Dave Stewart, vice-chief of staff. Department chiefs elected were: Dr. James G. Stuckey, chief of surgery; Dr. W. Mage Honeycutt, chief of medicine; Dr. Everett McClintock, chief of obstetrics and gynecology; Dr. Harold Hedges, chief of family practice; Dr. W. Turner Harris, chief of radiology; Dr. Aubrey Smith, chief of psychiatry; Dr. E. L. Milner, chief of eye, ear, nose and throat; and Dr. Dale D. Briggs, chief of pediatrics.

Dr. Norris Retires

After sixty-one years of practicing medicine (during which time he estimates he delivered more than 3,000 babies), Dr. R. O. Norris of Tuckerman has retired. He began his practice in Sharp County in May, 1911. In August, 1911, he moved to Jackson County, where he had con-

tinuously practiced except for time for additional training and about three years spent in practice in Jefferson County.

Dr. Downs Honored

Dr. Ralph A. Downs of Little Rock was presented a Scientific Exhibit Award by the North

Central Section of the American Urological Association. He received a special prize for his exhibit entitled "Congenital Polyps of the Prostatic Urethra."

Dr. Downs has been accepted as a member of the Society of Pediatric Urology.



THINGS



TO

COME

Eighteenth Annual General Practice Review

The Eighteenth Annual General Practice Review will be held February 7-12, in Denver, Colorado. The Review is presented by the Clinical Departments and the Office of Postgraduate Medical Education, University of Colorado School of Medicine. For more information contact:

The Office of Postgraduate Medical Education
University of Colorado School of Medicine
4200 East Ninth Avenue
Denver, Colorado 80220

American Fertility Society to Hold Meeting

The American Fertility Society will hold its Fifth Postgraduate Course and 28th Annual Meeting at the Waldorf-Astoria in New York City. The Postgraduate Course will be held February 27th and will consist of eight seminars. The Annual Scientific Meeting of the Society

will be held February 28th through March 1st. For more information contact:

Herbert H. Thomas, M.D., Medical Director
The American Fertility Society
1801 Ninth Avenue South, Suite 101
Birmingham, Alabama 35205

American College of Physicians to Present Courses

The American College of Physicians will present a course on "Diagnosis and Management of Infectious Diseases," February 23-25, 1972, at the Center for the Health Sciences, NPI Auditorium, Los Angeles, California.

The College will also present a course on "Advances in Clinical Endocrinology," March 7-10, 1972, in Boston, Massachusetts. For more information on either course contact:

Registrar
Postgraduate Courses
American College of Physicians
4200 Pine Street
Philadelphia, Pennsylvania 19104

Center for Disease Control to Sponsor Conference

The Department of Health, Education and Welfare's Center for Disease Control will sponsor a national conference on current concepts in communicable disease control at the Sheraton-Lincoln Hotel in Houston, Texas, March 13th through March 16th.

Central Florida Medical Meeting to Be Held

The Seventeenth Annual Central Florida Medical Meeting will be held at the Contemporary Hotel, Walt Disney World, Orlando, Florida, March 15th through March 18th.

Postgraduate Symposium Set for April

A postgraduate symposium "The Cardiopathy of Aging," sponsored by the Veterans Administration and the University of Arkansas School of

ANSWER—Electrocardiogram of the Month

Abnormal QT interval and T waves. Phenothiazines, particularly in high doses, may produce aberration in cardiac repolarization. This is most commonly characterized by prolongation of the QT interval. On occasion QT prolongation may lead to the R on T phenomenon and consequent moderately high doses of phenothiazines should be periodically checked from the ECG standpoint with these consequences in mind.

Jahn E. Douglas, M.D.
Assistant Professor of Medicine
Director, Heart Station, University of
Arkansas Medical Center

Medicine, will be presented April 6th and 7th, 1972, in the Worthen Auditorium, Worthen Bank Building, Capitol Avenue and Center Street, Little Rock.

Program Agenda—April 6th:

- 9:10 a.m. Definition and Basic Concepts
- 10:30 a.m. Pharmacologic Aspects of Therapy
- 11:30 a.m. Management of Congestive Heart Failure
- 2:00 p.m. Arrhythmias
- 3:20 p.m. Electrocardiography and General Considerations
- 4:15 p.m. Socio-Economic Problems of the Elderly Cardiac
- 5:00 p.m. Adjourn
- 8:15 p.m. Care of the Elderly Patient in the British Isles

Program Agenda—April 7th:

- 8:30 a.m. Pulmonary Aspects of Cardiology of Aging
- 10:15 a.m. Surgical Aspects of Cardiopathy of Aging
- 11:00 a.m. Surgery, Drugs and/or Transplants for the Elderly
- 12:00 Noon Summary and Adjourn

Clergy-Medical Seminar to Be Held

Dr. Ernest E. Bruder, Director of Protestant Chaplain Activities, St. Elizabeth Hospital, Washington, D. C., and Professor of Pastoral Clinical Education at the Washington School of Psychiatry, will present two lectures at the North Little Rock Veterans Administration Hospital Chapel on March 13, 1972. Registration will begin at 9:00 a.m., lectures at 10:00 a.m. and 1:30 p.m.

Emergency Health Services Conference Slated for September

The Fourth Annual Emergency Health Services Conference will be held September 15th and 16th, 1972, in Little Rock. The Conference will serve as the annual section meeting of Section VI of the American College of Surgeons.



OBITUARY

Dr. Albert Wayne Lazenby

Dr. Albert Wayne Lazenby of Dumas died January 2, 1972. He was 41 years of age.

Dr. Lazenby was born in Danville, Arkansas. He was graduated from Arkansas Polytechnic College in Russellville in 1951. In 1955, he was graduated from the University of Arkansas School of Medicine. He completed his internship at the University Medical Center and then served two years with the United States Navy.

Dr. Lazenby began his practice in Dumas in 1958. The following year he joined the Desha County Medical Society and the Arkansas Medical Society and was active in both. In 1967, he was elected Councilor for the Fourth District of the Arkansas Medical Society, he served as vice-president of his county medical society and served on numerous committees of the State Society. He was also active in the Arkansas Academy of Family Practice.

Dr. Lazenby was a member of the First United Methodist Church, the Dumas Chamber of Commerce, the Lions Club, and he was a Mason.

Dr. Lazenby is survived by his wife, Mary Arnold Lazenby, two sons, one daughter, his mother, one brother, and one sister.

* * *

Dr. Francis Walter Carruthers

Dr. Francis Walter Carruthers died December 18, 1971, at the age of 79. Dr. Carruthers had been a resident of Little Rock since 1917.

He was born in Blooming Grove, Texas. He received his medical education from Baylor University College of Medicine and interned at Parkland City Hospital in Dallas, Texas. Dr. Carruthers was a former Pulaski County coroner, team physician for the Arkansas Travelers Baseball Club, and an instructor at the University of Arkansas School of Medicine. He had served on the staffs of St. Vincent Infirmary, Arkansas Baptist Medical Center, Arkansas Children's Hospital, and the Veterans Administration Hospital in North Little Rock.

Dr. Carruthers was a member of the Pulaski County Medical Society, a life member of the Arkansas Medical Society, a member of the Arkansas Orthopaedic Society, and was a Fellow in

the American College of Surgeons. He was a member of the First United Methodist Church, Trinity Masonic Lodge 694, the Arkansas Consistory and Scimitar Shrine Temple, and the American Legion.

Dr. Carruthers is survived by his wife, Kate Gibson Carruthers, two daughters, one sister, and four grandchildren.

* * *

Dr. Joseph Travis Polk

Dr. Joseph Travis Polk of Keiser died December 16, 1971. He was 73 years of age.

Dr. Polk was born in Dardanelle, Arkansas.

He was graduated from the University of Arkansas in 1921 and from the University of Tennessee College of Medicine in 1926. He began practicing in Keiser in 1928 and practiced there until his retirement in January, 1971.

Dr. Polk was a member of the Mississippi County Medical Society, the Arkansas Medical Society, and the American Medical Association. He served on the staff of the Osceola Memorial Hospital and was active in community affairs.

Dr. Polk was a member of the Keiser Methodist Church. He is survived by his wife, Margaret Friend Polk, one daughter, two sisters, two brothers, and two grandchildren.



Psychosis and Other Psychiatric Manifestations of Levodopa Therapy

G. G. Celesia and A. N. Barr (1954 E Washington Ave, Madison, Wis 53704)

Arch Neurol 23:193-200 (Sept) 1970

Sixteen of 45 patients receiving levodopa developed psychiatric phenomena, including psychosis, acute anxiety, and euphoria. Fourteen of the 16 (87.5%) had associated buccolingual or generalized dyskinesia, which is characteristic of levodopa toxicity. The levodopa psychosis-dyskinesia complex is reversible and most frequently controlled by diminution of levodopa dosage. It occurs mostly in patients with associated organic brain syndrome or in those suffering from postencephalitic parkinsonism.

Experimental Atherosclerosis in Normal and Subdiabetic Rabbits

K. F. Wellmann and B. W. Volk (86 E 49th St, Brooklyn, NY 11201)

Arch Path 90:206-217 (Sept) 1970

Twenty-four metabolically intact and 42 subdiabetic rabbits received a diet containing 1% cholesterol. Sub-diabetes, induced by small doses of alloxan or by appropriate, sequentially administered injections of cortisone and alloxan, is characterized by normoglycemia under ordinary conditions but hyperglycemia following repeated, normally nondiabetogenic small cortisone injections. Before and after cholesterol feeding the subdiabetic animals showed higher blood cholesterol, phospholipid, and total lipid values. In all

the phospholipid-cholesterol ratio was lowered, but in the subdiabetic rabbits this ratio was already low before cholesterol was added to the diet. The subdiabetic state was found to substantially increase the number of lesions in the myocardium and in the distal coronary artery branches. There was no difference in the normal and subdiabetic animals in the incidence of aortic and proximal coronary arterial atherosclerosis.

Long-Term Platelet Support of Patients With Aplastic Anemia

F. C. Grunet and R. A. Yankee (National Cancer Institute, Bethesda, Md 20014)

Ann Intern Med 73:1-8 (July) 1970

Long-term platelet transfusion support was studied in seven patients with aplastic anemia. All patients became refractory to platelets obtained from random donors by a median of eight weeks. Once a patient became refractory, the poor response to random donor platelets was not improved by splenectomy, corticoids, or androgens, or any combination of these. Platelets from family donors matched for histocompatibility antigens were given twice weekly for periods up to 77 weeks and continually provided excellent clinical responses. Splenectomy or high dose corticoid therapy, or both, improved the response to compatible platelets. The therapeutic benefit from compatible platelet infusion was substantially greater than could be provided by a fivefold greater mass of incompatible platelets.

Opportunities to Practice Medicine in Arkansas

ATKINS

Opportunity for GP as associate for young GP. Modern, 2-man clinic, all equipment available. Guaranteed income. Town becoming residential area for surrounding areas. Nearby mountains and lakes provide recreation. On Interstate 40, convenient to Little Rock. Contact: G. E. Malone, M.D., 733 West Main, Atkins 72823. 641-2992.

BELLA VISTA

Opening for GP's and/or surgeon to affiliate with a two-physician clinic. Radiology, laboratory and pharmacy services in the area. Primarily a resort-retirement community, located 4 miles from Bentonville. Plans for expansion of 35-bed hospital to capacity of 105 beds. Contact: Louis R. Munos, M.D., Concordia Medical Center, Bella Vista 72712. 855-3177.

McCRORY

2 physicians want third GP to join well-established practice. Small town, large rural drawing area. Salary negotiable to start, with option to buy share of practice later. 2-year-old hospital. Contact: B. E. Hendrixson, M.D., 306 East Third, McCrory 72101. Phone 731-2511.

MONTICELLO

Opportunity for Family Practice, either solo or in association with another physician. Town of 5,500 has a branch of the University of Arkansas as well as being site of State Hospital regional satellite. 5 physicians in practice. There is a 53-bed hospital.

WALDRON

Town of 2,200 with very large trade territory. Additional physician needed—only two in practice. 26-bed hospital. Office space available.

FORT SMITH

Physician wanted for four-man group covering emergency room at hospital. Unique work schedule. Good opportunity.

McGEHEE

Population 5,000; 2 physicians. County hospital with 26 beds. General need for additional physicians in that area of the State. Large trade territory—good opportunity for family practice.

NEWPORT

Population 7,700. Opening with clinic for well-trained GP, Pediatrician or Obstetrician/Gynecologist. Modern clinic building. Financially rewarding opportunity.

MELBOURNE

Physician needed for town of about 1,000 with large trade area. One physician in practice. Office space available.

COTTON PLANT

Town of 1,700 without a physician. Citizen's Committee heading drive to build clinic. About 65 miles from Little Rock.

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March, 1972

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THE JOURNAL OF THE Arkansas MEDICAL SOCIETY

Vol. 68 No. 10

FORT SMITH, ARKANSAS

96th ANNUAL SESSION
ARKANSAS MEDICAL SOCIETY
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Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 68, No. 10. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

The Problem Oriented Method in Family Practice

John M. Tudor, Jr., M.D.*

One of the most difficult dilemmas in practice is the management of the patient with multiple problems. The most careful of physicians when managing several of these problems will occasionally neglect another significant illness. Lawrence L. Weed has developed the problem oriented method of record keeping and demonstrated its usefulness in hospital patients.¹

Problem Oriented Record

Weed outlined in 1968 the basic format of the problem oriented record which he had developed for use at Western Reserve University School of Medicine, recognizing that the physician must accept the obligation of managing multiple problems in a given clinical situation. He felt that previous methods of record keeping did not allow the physician to give adequate attention to each separate problem.

Beginning with a *base of data* including information from history, physical examination, lab, x-ray, etc., the findings are divided into a list of numbered problems, listed in order of importance. The doctor is encouraged to list the problem exactly as he sees it, i.e., "systolic heart murmur." Creating a comprehensive *problem list* for each patient provided a table of contents to the initial work-up and the subsequent progress notes. Focusing attention on the problem at the level at which it is understood rather than on a premature diagnosis appeared to encourage adequate evaluation rather than unfounded conclusion.

A plan is written for each problem, including diagnostic, therapeutic, and educational steps. Following the problem list and the plans, progress notes are numbered and titled referable to the original set of problems. Each progress note includes information on Subjective Data, Objective Data, Assessment, and Plan for that prob-

lem. New problems are added to the problem list and discussed in similarly numbered and titled progress notes.

The fourth phase is *reevaluation*, comparing the results with the plans and making further adjustments or corrections to problem list and plan.

The problem oriented progress notes provide a mechanism for frequent review of problems and updating of indicated therapies, which is in concert with modern theories of cybernetics or information feedback. The accumulation of data referable to specific problems provides the physician with a more complete basis for decisions on diagnosis, treatment, and long term management. Some of the data, thus acquired, can be produced for the physician by personnel working with him in the hospital or in his office.

A second advantage of the problem oriented approach is that it justifies the consideration of a single problem at a given time, which is frequently necessary in a busy office practice. It also encourages the listing of problems of psychiatric or socio-cultural nature, which may be discounted or omitted in a list of diagnostic terminology alone. With these principles in mind, the physician can more adequately evaluate:

1. The completeness of his primary evaluation.
2. The adequacy of the treatment plan and diagnostic plan he had proposed.
3. The completeness with which the plan has been carried out.
4. The capabilities and the deficiencies of health resources available to him in the office, the hospital, and the community. This would include the need for lab, rehabilitation, intensive care, etc.

The time limitations of hospital admissions have kept a finite limit on the number of problems handled by Weed under these conditions.

*Assistant Professor and Director, Division of Family and Community Medicine, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

His system is generally accepted as a modern effective innovative approach which is adaptable for computer data.²

The application of the problem oriented system to office practice requires a continuing interest in identifying and listing the patient's problems. It bears fruit when the problem list reminds the physician of a problem from the past or when it identifies a problem on which he needs consultation.¹ Bjorn and Cross discuss the application of the method in the design of a private practice.³

Problem Oriented Practice

The method of Weed and the adaptation by Bjorn and Cross appear to offer a mechanism for office record keeping which approaches resolution of at least three problems found in hurried episodic medical care. First, it justifies academically the consideration of a single problem (including self limited problems) on a brief office visit. At the same time it provides a perspective for that problem in relation to the patient's cumulative problem list. It does, thereby, help the practitioner through his records to see a constellation of problems which may resemble a well defined syndrome and also to remind the practitioner of other more chronic problems which deserve his attention on this or another scheduled visit. Thirdly, they provide an index of problems for each patient, some diagnosed and some not well defined, which may provide retrospective evidence of the incidence of certain conditions and feedback on more effective ways of identifying, studying, and treating such conditions.

The University of Arkansas Family Practice Center is using an adaptation of the Weed record which was developed at the University of Rochester Family Practice Unit. The outside folder and the office visit pages are adapted from the system developed by Dr. Eugene Farley. They provide tabular flow sheets for repeated items such as immunizations and screening tests. A problem list modified from Weed is included as a table of contents or index to the types of problems listed in the chart. Figure 1 shows the typical page of the office chart which records two office visits showing the relative interest that was placed on different organ systems in two sequential visits.

The office visit pages are divided into columns, two on each side of each sheet. After a

statement of the subjective complaint, the objective data can be recorded on a skeletal outline, using more or less space as needed. The immediate advantages of this format are threefold:

1. Where dictated notes are used, the physician can dictate by number, and the secretary can put the information on the appropriate part of the page.
2. Following a single organ problem sequentially requires only a horizontal scanning across several columns.
3. A quick survey of several visits can indicate which organ systems have not been examined and might be indicated for check-up in order to complete the periodic survey.

Patients with known chronic diseases are followed over longer periods of time with tabular notes on a flow sheet adapted by the Massachusetts General Hospital after Bjorn and Cross.⁴

This flow sheet is used to follow congestive heart failure, hypertension, diabetes, and pulmonary disease.

A yellow sheet is used to secure the lab slips returned from various laboratories. A cumulative list of x-ray procedures can be kept inside the back cover of the individual chart, allowing access to data about exposure also. The rear cover of the individual folder is a list of patient education aids which are used for patient instruction and is adapted from the individual folder used by Lynn Carmichael at Miami.

Data Base

One of the requirements for use of the problem oriented record to define the total problem list of a given patient is a collection of information Weed calls the *Data Base*. The *Data Base* includes the types of information we customarily use, that is, comprehensive history, physical examination, laboratory information, and the results of the evaluation of previous treatment. For a limited number of patients in hospital practice, the physician has classically collected the majority of this data himself. A busy practitioner will be pleased to know that studies of medical decision making have indicated that a major portion of this data base can be collected both efficiently and effectively by other medical personnel.⁵ Weed,¹ Bjorn and Cross,³ Irving Kanner,⁶ and many others have developed ques-

tionnaires both using a computer and using pencil and paper, which elicit major historical items from the patient before the physician's evaluation.

Automated laboratory examinations have made panels of test available to the physician

by mail or messenger, which if chosen appropriately for each patient, provide a range of screening tests for a number of conditions. Some authors have indicated wide range medical screening as an initial step in each patient's entry to the health care system.⁷ In Garfield's system an

FIGURE 1

Date Time a.m. Office Hosp New Ill Routine				Date Time a.m. Office Hosp. New Ill. Routine			
p.m. House Emerg. Repeat				p.m. House Emer. Repeat			
				HT-WT T-P-R-BR			
				C. C. H.P.I.			
				1. General Appeorance 2. Skin 3. Nodes			
				4. Heod and Neck 5. Eyes and Vision 6. Fundi 7. Eors 8. Nose 9. Mouth 10. Teeth 11. Throat			
				12. Chest 13. Lungs 14. Breasts 15. Heart			
				16. Abdomen 17. Bock 18. Genitolio 19. Pelvis 20. Rectol			
				21. Extremities 22. Pulses 23. Endocrine			
				24. Neurological Orientation and Jedgement 25. Sensory 26. Motor and Coordination 27. Psycho-social			
				Impression Disposition Medicotion and Lob			

S= Subjective; O=Objective; A=Assessment, and P=Plan

abnormal test result is relied upon to distinguish between the "asymptomatic sick" and the "worried well" persons.

A package of physiological measurements could also be produced as part of the *data base* for each

new patient. We do rely upon nurses and technician's measurements of numerous factors in hospital practice, including regular vital signs, measurements of capacity, such as pulmonary function, and sophisticated monitor records, such

FIGURE 2

NAME _____		YEAR OF BIRTH _____		IDEAL WEIGHT _____	
DIAGNOSES _____					
DIET:	DATE				
ORDERED/ADHERANCE	CALORIES				
(Poor, Fair, Good)	SALT				
	OTHER				
MEDICINES: _____					
ORDERED/TAKEN _____					
(in last wk.) _____					
SYMPTOMS: ACTIVITY/FATIGUE _____					
severity last	DYSPNEA/COUGH				
week rated 0-4+	SPUTUM/(COLOR)				
no. of pillows	ORTHOPNEA				
times per night	NOCTURIA				
episodes last week	ANGINA				
other: _____					
PHYSICAL EXAM: WEIGHT _____					
RESP. RATE _____					
BLD. PRESSURE/PULSE SITTING _____					
STANDING _____					
RHYTHM _____					
HEART _____					
LUNGS _____					
EDEMA (0-4+) R/L _____					
CONDITION OF FEET R/L _____					
LAB: URINE TESTS AT AM/NOON _____					
HOME BY PATIENT PM/HS _____					
IN LAST WEEK _____					
OFFICE URINE SUGAR/ACETONE _____					
ANALYSIS PROT./CELLS _____					
BLOOD SUGAR/HOURS P.C. _____					
HCT (HGB) /BUN (CREAT.) _____					
NA/K _____					
CHEST FILM/EKG _____					
VC/1' FEV _____					
other: _____					
COMMENTS: _____					

CODE: * = abnormal, see record; ✓ = normal; NC = no change

as in coronary care. Figure 3 shows a list of physiological measurements which could be performed by allied health personnel, properly

trained for each procedure, which would provide an initial screening input for a number of conditions.

PHYSIOLOGICAL MEASUREMENTS

FIGURE 3

	Required Equipment	Optional Equipment
1. Ht. — Wt.	Scales	
2. Blood pressure and pulse	Sphygmomanometer	
3. Visual acuity and color testing	Eye charts	
4. Tonometry	Schiotz Tonometer	
5. Audiometry		Puretone audiometer
6. Spirometry	1 sec. Vitalor	
7. Achilles reflex		Reflexometer
8. PPD		
9. Stereopsis		
10. Skin fold thickness		Standard calipers
Other tests performed included:		
11. X-ray — chest		
12. X-ray — mammogram		
13. Electrocardiogram		Ekg machine
14. Cytology — vaginal		
15. Cytology — sputum		Ultrasonic Nebulizer

Discussion

No one questions the physician's expertise in the evaluation of complex problems, in the subtle skills of physical diagnosis, or in the continuing management of multiple problems in a community setting. It appears, however, that numerous duties which he performs could be performed by other personnel in other ways. A preselected portion of the *data base* in the evaluation of a given patient, supplemented by physical findings of the physician's examination, would provide for a thorough evaluation with efficient use of the physician's time.

A problem oriented practice provides a mechanism for organizing patient records to allow meaningful planning, thorough self-evaluation, and efficient productivity.

Further evaluation of such a method is planned under a realistic practice setting to de-

termine the relative ratio of persons needed to provide the different kinds of data.

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Placental Localization

Kil Soo Lee, M.D.

Radiologic procedures for placental localization have developed over the past 40 years. In this article the literature has been reviewed and relevant information is presented as to why and how the procedures developed and in what direction they are heading in the diagnosis of placenta previa. Principle, technique and interpretation are briefly discussed and their accuracy and radiation will be compared.

The term placenta previa is applied when any part of the placenta is implanted to the lower uterine segment. It is a common and grave complication of late pregnancy, usually manifest clinically by painless vaginal bleeding occurring in 0.5% of pregnancies (1). With modern obstetrical techniques and hospital facilities, the maternal fatality rate due to placenta previa is now only one out of 1000 deliveries. However, the perinatal death rate is still high, ranging from 15 to 20% of all placenta previa cases, mostly due to premature labor (1). Vaginal and rectal examinations are dangerous in this condition because catastrophic hemorrhage may result from the detachment of blood clots or further separation of the placenta by examining fingers. For the safe diagnosis of this serious disease, a variety of radiologic procedures have been developed to localize the site of placental attachment. Thus radiologists can work with obstetricians to plan the safest and most economic course of management. Once the presence of placenta previa has been excluded by radiologic procedure, the patient may be safely sent home, and valuable antenatal beds are saved for other purposes. And the advantages of this conservative management to the patient are obvious. Crawford, et al., (2) reported that among 1234 cases of antepartum hemorrhage, 340 patients were treated before the era of placentography, and their average antenatal hospital stay was 18.9 days while it was only 8.9 days for the remaining 894 patients after the employment of diagnostic placentography. For 894 patients evaluated over a period of 6 years it was a saving of 8940 hospital days. Of even greater importance was the fact that the conservative management

of placenta previa based on the radiographic placental localization in the same group of patients resulted on a substantial decrease in perinatal death from 25% to 14.9%.

Use of the radiographic soft tissue placentogram was extensively investigated in 1930-1940's inspired by the early paper of Snow and Powell (3) in 1934. With supplement of gravitational technique devised first by Ball and Golden in 1941 (4) it provides a fairly accurate localization of the placenta without overly much radiation to the mother or to the fetus (5). However, some authors (6) contend that it cannot always delineate the total extent of the placenta and is very difficult to interpret when the placenta is located posteriorly.

Pelvic arteriography, first introduced by Dos Santos, et al., in 1931 (7) has some technical manipulations, relatively high radiation to the fetus, and possible complications, e.g., arterial thrombosis. Thus it is not used routinely but for cases where the soft tissue technique supplemented by gravitational method fail to localize the placenta (5).

Ude, et al., (8) reported cystographic diagnosis of placenta previa in 1934. It is currently not used commonly because it is helpful only in the patient with a vertex presentation of the fetus (8) and an anterior implantation of the placenta (9).

The contrast materials originally available for amniography were too irritating, and caused many fetal deaths and the induction of undesired labor (10). The clinical applicability of this procedure, thus, has been doubted since its introduction by Menees, et al., (11) in 1930, although there were a few encouraging reports (10, 12).

Recently placental localization employing radiopharmaceuticals has been extensively studied. It has been reported by many authors (13, 14) to be simple, accurate and safe with far less radiation to the fetus than radiographic methods. It has replaced non-radiopharmaceutic techniques in many institutions and probably will be used even more in the future.

Two non-radiographic, non-radiopharmaceutic procedures, thermography and ultrasonic scanning, have been more recently introduced. Thermography, in spite of its great advantage, e.g.,

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absence of radiation to the fetus, does not appear to be an ideal approach because many studies (15, 16) have shown that it is much less accurate in localizing the placenta than both ultrasonic and radiopharmaceutic scanning. Ultrasound, on the other hand, has been commended by many authors (17, 18) to be as accurate or even more accurate than the radiopharmaceutic method while having no problem of radiation to the fetus. With further refinement of technique, it offers considerable promise for the future.

Soft Tissue Placentogram

Technique: in spite of some advantages of the erect position, the supine position has been favored by many radiologists (5) in the soft tissue placentogram because in this position, much of the patient's motion can be eliminated. It is further minimized by the use of a compression band (19). Low voltage, 60 to 70 Kvp, is essential to differentiate soft tissue planes (5). Exposure of 0.5 to 0.75 seconds is employed. Films are made in AP and lateral projections. For the lateral projection, two films are exposed simultaneously: one between a pair of high speed intensifying screens, the other between a pair of par-speed intensifying screens. The film between the high speed screens placed on the tube side will record the detail of the dense structures of the posterior half of the uterus while the film between the par-speed screens on the back of the cassette receives a reduced exposure suitable for recording the anterior half of the fundus (5).

Analysis of soft tissue shadows: Clear visualization of the radiolucent line, which represents the subcutaneous fat layer of the fetus (3), indicates that the films were adequately exposed for soft tissue detail, so essential in identifying the placenta (5). Between this fat line and the periphery of the uterus there are four structures: the wall of the uterus, the skin of the fetus, the placenta, and amniotic fluid. The uterine wall and the fetal skin are all thin and unimportant for our purpose. But the placenta and amniotic fluid are of the same radiographic density and this necessitates dependence on the indirect identification of the placenta by evaluating the relationship of the fetal fat line to the uterine wall (5).

Calcification in the placenta is observed on 30 to 40% of all prenatal roentgenograms, most frequently after the 32nd week of gestation (19). It is one of the characteristic features of placental

aging (20) and of no clinical significance (21). On the other hand this deposition of calcium in the placenta is of tremendous help in localizing the site of placental attachment. When calcification occurs throughout the placenta, not only the location but also the extent of the placenta is apparent so that the lower limit of the placental tissue can be precisely determined.

Interpretation: Placenta previa can be ruled out as the cause of vaginal bleeding in the majority of cases when the placenta is visualized in the fundal location. Soft tissue films suggest the need for further studies on the following occasions (5). First, the placenta is not identified in its normal position. Second, the placenta is "suspected" of being in a low position. Third, the presenting part is in an eccentric position. And fourth, the fetus is in a persistent malpresentation.

Gravitational Technique

Principle: The fetus is heavy and sinks down in the lighter amniotic fluid to the lowest part of the sac. When the mother is in an erect position the presenting part will normally be centered over the inlet. If placenta previa is present it will cause displacement of the presenting part away from the inlet.

Technique: Catheterization of the bladder immediately before examination is essential (22). An AP film of the lower abdomen and pelvis is made with the patient either erect or 60 degrees semi-erect. Of the two positions many radiologists (22) prefer the semi-erect position: it provides more favorable condition for the presenting part to gravitate downward without being influenced by the mother's abdominal pressure. A true lateral film is also made with the patient erect. If the presenting part is more than 2 cm. from the promontory of the sacrum a second lateral film is taken with the patient in a 60 degree semi-erect position (5).

Interpretation: The distances between the superior margin of the symphysis pubis and the fetal head on the AP film and between the fetal head and the promontory of the sacrum on the lateral film should not be greater than 2.0 cm. (5). Greater measurements indicate the presence of placenta previa, especially when associated with an eccentric position of the fetal head. Hodge (22) reported 95% accuracy in both diagnosis and exclusion of placenta previa in 200 patients.

Pelvic Arteriography

Principle: About 1/8 of the cardiac output in a pregnant woman is diverted to the placenta (23). Visualization of this big blood pool in the placenta by a suitable contrast material leads to its localization. It should be used between the 5th and 8th months of gestation. After the 8th month a plain soft tissue technique with the help of the gravitational method is accurate and safe, and arteriography is not indicated (24).

Technique: After the patient is tested for hypersensitivity, 20-50 ml. of Renografin 60% is injected through a Lindemann cannula into the femoral artery. Usually three exposures are made at one second intervals starting just before completion of the injection. If the AP view reveals any part of the placenta in the pelvis, a lateral film is made to determine its exact location.

Interpretation: There are two phases, arterial and sinus, in the filling of the placental blood pool by contrast material. The arterial phase is characterized by the increasing tortuosity of uterine vessels as they converge upon the placenta. As the sinus filling phase is reached, the appearance of the intervillous spaces filled with radio-opaque material is so characteristic that it is easily recognized (24).

Cystography

Principle: When the bladder is opacified by contrast material in cases of placenta previa, the space between the fetal head and the bladder is widened due to the intervening placenta.

Technique: After the bladder is completely emptied by catheterization, 35-40 ml. of Sodium Hippurate is introduced into the bladder. An AP film of the pelvis is made with the patient supine.

Interpretation: The normal distance between the fetal head and the contrast filled bladder is 1.0 cm. or less (5). If the placenta is interposed, the distance increases accordingly.

Amniography

Principle: Fetal soft parts and the placenta can be outlined by increasing the radiographic density of the amniotic fluid by the injection of a suitable contrast material into the amniotic sac.

Technique: Forty milliliters of 70% Diodrast (12) or 1.5 ml. of Renografin 60% (10) is injected into the amniotic cavity through a 20 gauge lumbar puncture needle inserted in the para-

umbilical skin through the abdominal and uterine walls. The typical midpoint dose for an AP and a lateral roentgenogram is maximum of 0.7 rads which is essentially the same as that of soft tissue placentogram (10).

Interpretation: The placenta is visualized as a negative shadow in the opacified amniotic fluid. Blumberg, et al., (10) reported 98% overall accuracy in 50 patients examined.

Radiopharmaceutical Localization of Placenta

Brown (25) first demonstrated that the placenta could be outlined by the use of ^{24}Na in 1950. Subsequently similar techniques of sector or surface counting have been introduced using improved radiopharmaceuticals, e.g., ^{131}I labeled human serum albumin (Weinberg, et al., 1957) (26) and ^{51}Cr labeled red blood cells (Paul, et al., 1963) (27). These procedures were reported to be quite simple and safe, and the accuracy of the placental localization was encouraging (28, 29). But the poorly collimated surface detectors then available afforded only a gross estimate of the size and position of the placenta.

In 1964 McAfee, et al., (30) successfully employed technetium-99m labeled serum albumin for the scintillation scanning of the placenta. With a short half life (6 hours) and lack of beta emission $^{99\text{m}}\text{Tc}$ reduces the radiation to the fetus while permitting a relatively high test dose with good image resolution of the placental vascular pool. Also its energy, 140 Kev is excellent for the external detection by scintillation camera. In addition, $^{99\text{m}}\text{Tc}$ is superior to others in localizing the posteriorly implanted placenta, especially before the 31st week of gestation (31). In spite of these advantages of $^{99\text{m}}\text{Tc}$, ^{131}I labeled human serum albumin is now used in many institutions because the short half life of technetium requires a readily available source and the albumin must be tagged by a specially trained technician shortly before use. In an effort to eliminate the technically difficult tagging of $^{99\text{m}}\text{Tc}$ to the albumin, many studies were done using $^{99\text{m}}\text{Tc}$ as a free pertechnetate ion (TcO_4^-). However this method was not widely accepted because of the rapid diffusion of the $^{99\text{m}}\text{Tc}$ pertechnetate ion into the extra-vascular fluid. Recently Fish, et al., (32) described a procedure, rapid sequential vascular cine-photography, to overcome this shortcoming. This technique was claimed to have many advantages (32). First, it is not necessary to label

^{99m}Tc to the albumin. Second, multiple views can be taken which are essential in the precise localization of the placenta especially when it is implanted on the posterior wall of the uterus. Third, even in the case of continuous bleeding, there is no misleading localization of the placenta. On the contrary, a dynamic record of the bleeding can be obtained (Fig. 1). Fourth, because rapid cine-photography is taken before the ^{99m}Tc pertechnetate ion is excreted into urine, there is virtually no bladder accumulation of the radioactivity (Fig. 2).

More recently Stern, et al., (33) reported the potential usefulness of Indium-113m, which has a half life of 1.7 hours and no beta radiation so that it can be administered in millicurie doses to result in an excellent image on the scan (Fig. 3). When it is injected intravenously, it binds rapidly with the beta globulin fraction of the serum protein, transferrin, so that no labeling to the albumin is necessary. This is one great advantage over ^{99m}Tc . Furthermore, there is no significant accumulation in the bladder.

^{131}I labeled human serum albumin (RISA): One hour after 10 drops of Lugol's solution is given orally to block the maternal and fetal thyroidal uptake, 3-5 microcurie of RISA is injected into the antecubital vein. Counting is started 10 to 15 minutes after the injection using

B.

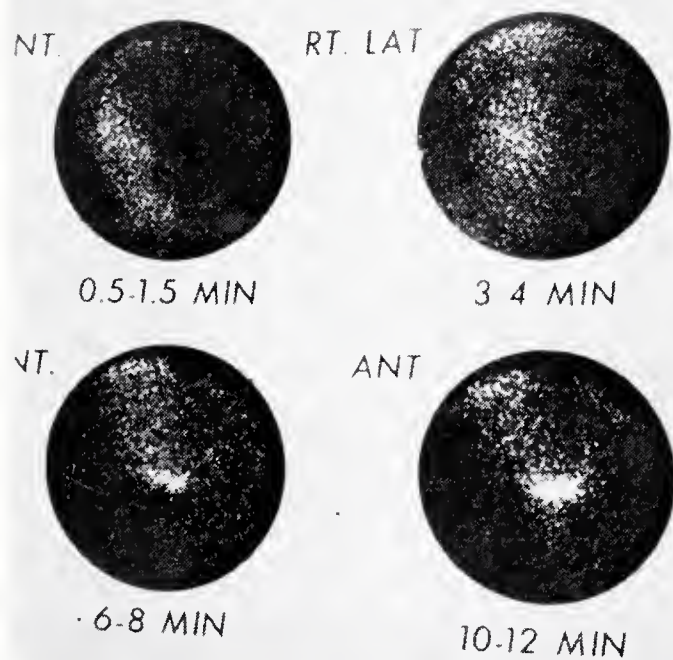


Figure 1.

^{99m}Tc -pertechnetate placental localization in a patient during active placental bleeding. Accumulation of radioactivity is noted at a low posterior right lateral wall of the uterus. A downward extension of radioactivity at 10-12 minutes represents the observed vaginal bleeding. (Courtesy: Myron Pollycove, M.D., et al.: Rapid Scintiphotographic Placental Localization Utilizing Free ^{99m}Tc -Pertechnetate, J. of Nuclear Medicine 8:782, 1967.)

a scintillation probe at 12 to 21 positions over the abdomen. A reading is taken over the precordium, and counts over each position are recorded as a percentage of the precordial count (Fig. 4). Shapiro and Shaul (34) reported 96% accuracy with this technique in 75 patients, considerably better than the 78% accuracy by radiographic procedures. With 5 microcurie of ^{131}I , the fetal total body radiation was only about 17 millirads which is 0.1% of that from a single abdominal radiograph.

^{99m}Tc labeled serum albumin: One hour after 20 drops of Lugol's solution was given orally, 500-1000 microcuries of ^{99m}Tc labeled serum albumin is injected into the antecubital vein. Scintillation scanning is usually started 30 seconds after the injection. Krohn, et al., (35) reported 100% accuracy by this method in 27 patients compared with 97% accuracy by RISA in 61 patients. With 1000 microcuries of ^{99m}Tc , the maternal total body radiation was 3 millirads and the fetal total body radiation was less than

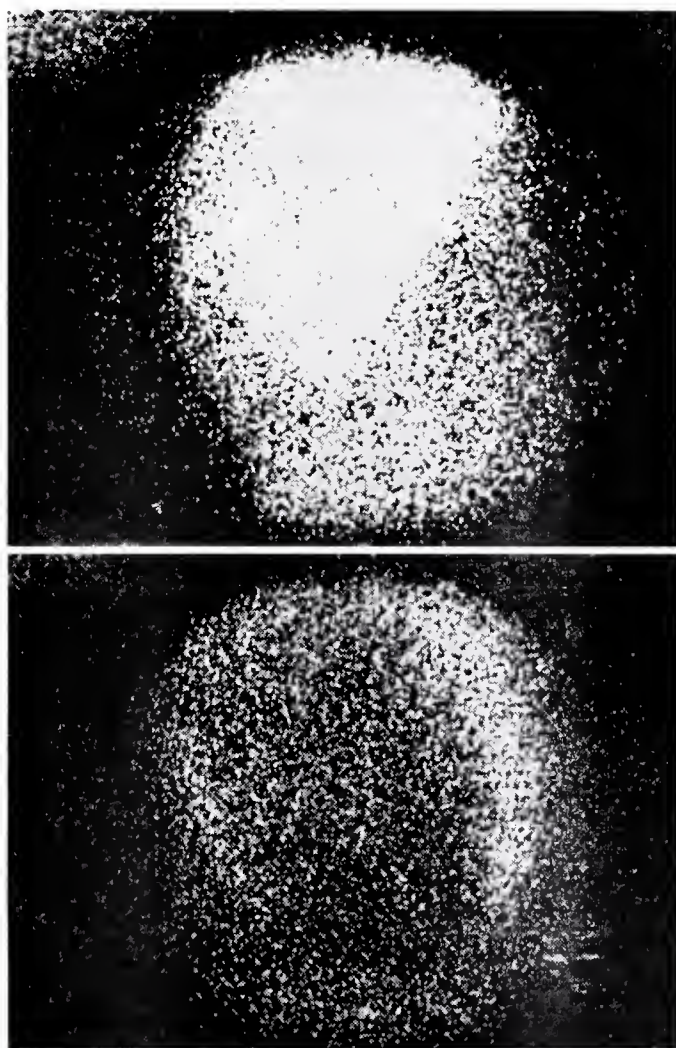


Figure 2.

^{99m}Tc -pertechnetate placental localization. The placenta is seen in the anterior, superior part of the uterus as an area of increased radioactivity. Note absence of bladder accumulation. (Courtesy: John Lane, M.D., Baptist Medical Center, Little Rock, Arkansas.)

5 millirads.

^{99m}Tc as a free pertechnetate ion: After rapid IV injection of ^{99m}Tc ion in a bolus, sequential imaging of the placental vascular pool is performed in 30-90 seconds with the Anger type scintillation camera. Fish, et al., (32) re-

ported 100% accuracy in 50 patients. And the radiation to the fetus was estimated to be less than 3 millirads.

^{113m}In : After the patient voids, 1.0-1.5 millicurie of ^{113m}In is injected intravenously. An immediate scan is done with the Anger type camera. Mishkin, et al., (36) reported 71 accurate cases out of 75 patients with suspected placenta previa. With 1.0-1.5 millicuries of ^{113m}In , the total body radiation to the fetus was only 15-25 millirads which is far less than that from a single abdominal radiograph (500-1000 millirads). It is even less than that from 5 microcuries of ^{131}I (75 millirads) (37).

Summary

Because of the danger involved in digital examination, various radiologic procedures have been developed to localize the placenta for the diagnosis of placenta previa. Among radiographic procedures, use of a soft tissue technique supplemented by the gravitational method was generally accepted. Recently placental localization employing various radiopharmaceuticals has been reported with encouraging results. It is quite simple, safe, and accurate in the localization of the placenta. It results in far less radiation to

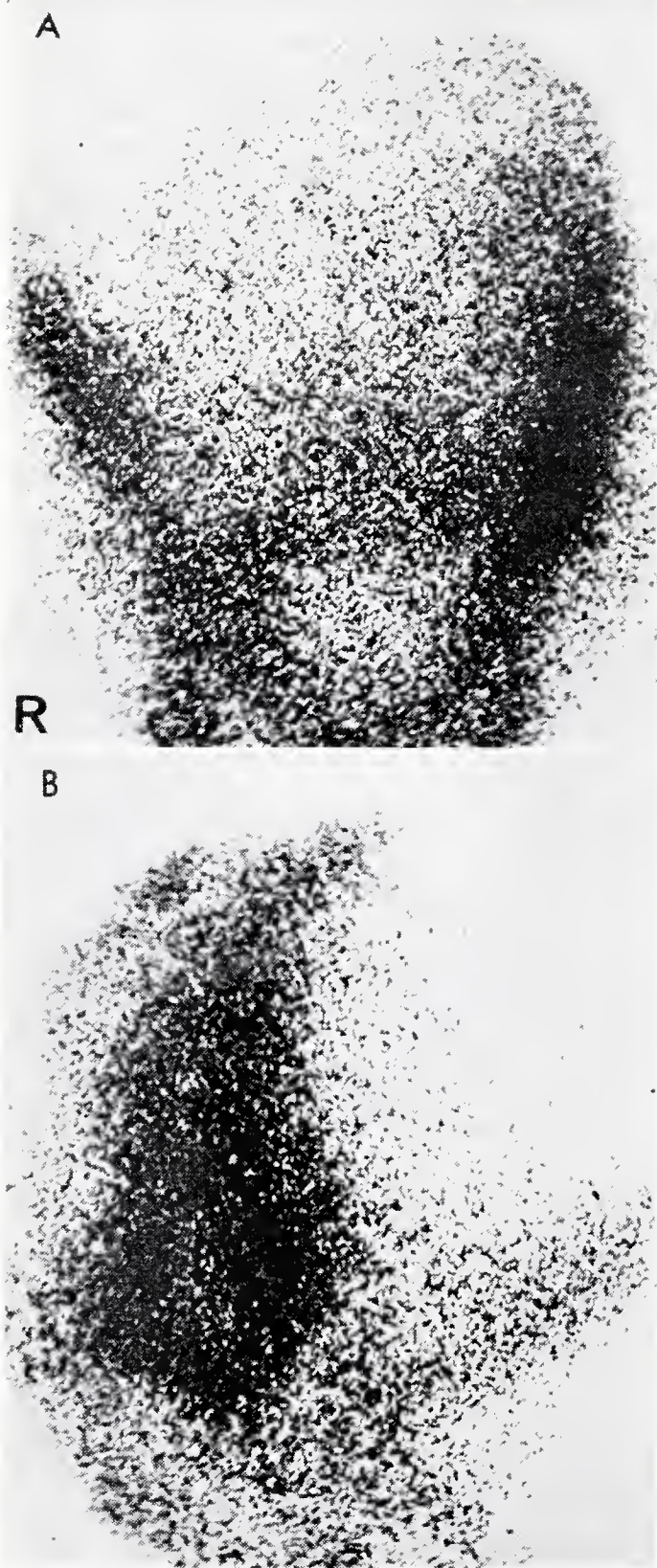


Figure 3.

Placental localization by ^{113m}In . Anterior and left lateral scintophotographs demonstrate a low anterior left lateral implantation of placenta. Excellent image resolution can be appreciated. (Courtesy: Fred S. Mishkin, M.D., et al.: Placental Imaging With ^{113m}In , Am. J. Roentg. 109:778, 1970.)

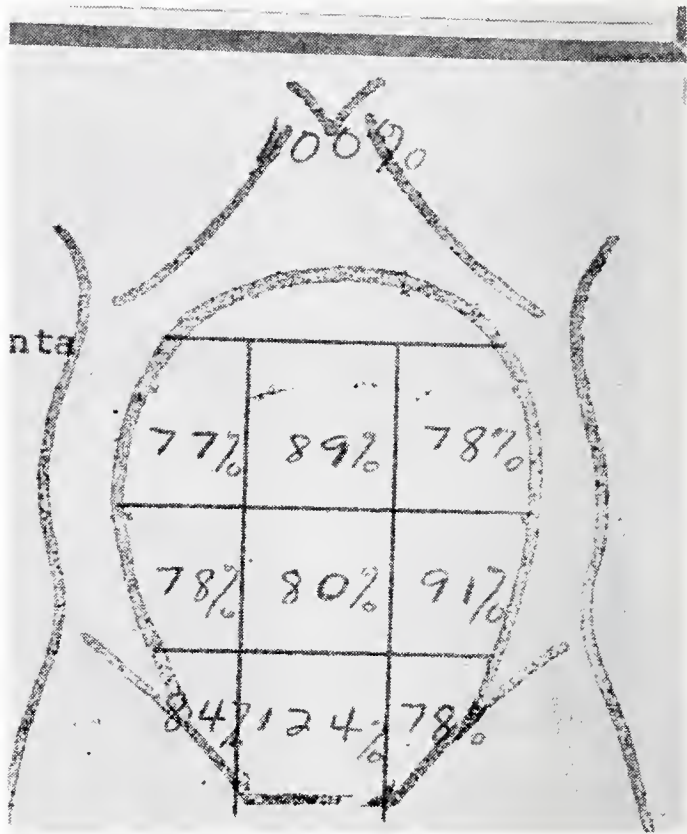


Figure 4.

Placental localization by ^{131}I -labeled human serum albumin. Whole abdomen is divided into 9-12 sectors and counts over each sector by a scintillation probe are recorded as a percentage of the precordial count. In this patient the lowermost sector showed the highest count, 124% and thus the diagnosis of placenta previa was made. It was proven by C-section.

the fetus than radiographic procedures, and has replaced the nonradiopharmaceutic methods in many institutions. ^{131}I labeled serum albumin is generally used even though $^{99\text{m}}\text{Tc}$ labeled serum albumin has some advantages. More recently, $^{113\text{m}}\text{In}$ was introduced, and is promising. Thermography has a desirable feature, e.g., absence of radiation, but is less accurate than other commonly used procedures. Ultrasound offers considerable promise for the future.

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DEPARTMENT OF

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SEMINAR

Chemical Mediators of Immediate Hypersensitivity

Authors—Joseph W. Matthews, M.D.* and Vida H. Gordon, M.D.**

Mediator, according to Webster's Dictionary, is a noun derived from the latin verb "mediare" which means to be in the middle of. This is a particularly germane definition when applied to immediate hypersensitivity because the editor is between an antigen-antibody reaction and tissue damage.

Concept of Chemical Mediator

Early in this century, Sir Henry Dale established the concept of histamine as a chemical mediator by duplicating anaphylaxis in the sensitized guinea pig with an intravenous injection of histamine.

In the 1920's, Sir Thomas Lewis described the appearance of first a red line, then a linear wheal surrounded by an erythematous flare which followed stroking of the skin.² He called this phenomenon the triple response and he proposed that it was evoked by histamine released by the mechanical trauma of stroking the skin. Histamine was thought to be the only mediator of immediate hypersensitivity for many years. Brocklehurst demonstrated that a second chemical mediator called slow-reacting substance of anaphylaxis (SRS-A) was released during asthma and anaphylaxis.³ SRS-A appears in the blood more slowly than histamine in reactions of immediate hypersensitivity and the effect of SRS-A on bronchial smooth muscle lasts much longer than histamine.

Histamine and SRS-A are the only well established mediators of immediate hypersensitivity in humans. The catecholamines, which include epinephrine, act in immediate hypersensitivity reactions as inhibitors to the release of SRS-A and histamine.

Biochemistry of Histamine

Histamine is stored in the granules of tissue mast cells and circulating basophils as a chemical complex with heparin and protamine. The stimulus for histamine release is the attachment of the complex of cell-fixed reagenic antibody and its antigen on the membrane of the mast cell or basophil.

In a series of biochemical steps, the permeability of the membrane of the mast cell or basophil is altered and the granules are extruded into the serum. The histamine from granules is displaced by sodium in the serum which normally has a high sodium concentration.

These two cells, the mast cell and basophil, differ in their sites of origin inasmuch as the mast cell is derived locally from the connective tissue while the basophil is formed in the bone marrow. The mast cell is probably more important than the basophil in reactions of immediate hypersensitivity.

Lichtenstein found that all of the plasma histamine is found in the basophil, eosinophil and neutrophil.⁴

There is a virtual absence of histamine in platelets, red cells and lymphocytes.

Histamine is a vasoactive amine formed by the

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action of histamine decarboxylase on the amino acid L-histidine. 51% of the plasma histamine is stored in basophils, 29% in eosinophils and 14% in polymorphonuclear leukocytes.⁵ In addition to antigen-antibody interaction, mast cells and basophils release histamine in response to trauma and certain chemical agents.

The human mast cell contains numerous cytoplasmic granules with a fine granular structure. These granules are composed of a biochemical complex of heparin, histamine and zinc ions.⁶

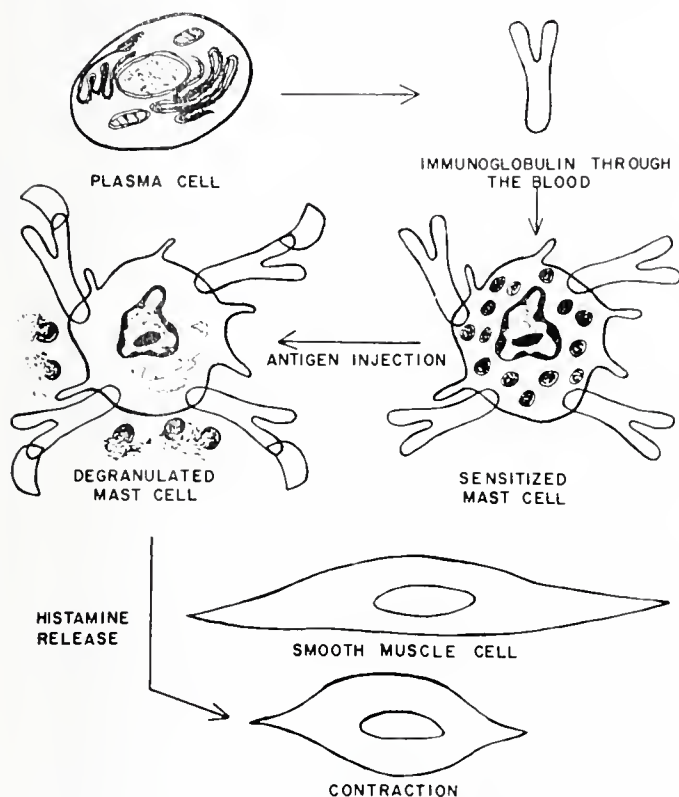


Figure 1.
Pathway of Anaphylactic Sensitivity in Man. (Reference 6.
Courtesy of the C. V. Mosby Co., St. Louis, Mo., 1970.)

Figure 1 diagrams the pathway of anaphylactic sensitivity. Antigens induce plasma cells to form immunoglobulin E which circulates through the blood and attaches to the surfaces of mast cells in the tissue and to the circulating basophils. Upon re-exposure to the antigen, the cell-fixed antigen-antibody reaction releases histamine from the sensitized cells.

Physiology of Histamine

There are five known pharmacologic actions of histamine once it is free in the circulation. One of its effects is contraction of smooth muscle, especially in human bronchioles. Small amounts of histamine produce a second response with increased vascular permeability of venules and resultant local edema. Large amounts of histamine cause vascular collapse and shock. A third reaction is increased mucus secretion by the mucus

glands of the eyes, nose and bronchii. The fourth action of histamine is increased acid gastric secretion. Lastly, histamine has a strong mobilizing effect on phagocytic cells in the tissues where it is released.³

In humans, mast cells normally function to maintain homeostasis in the tracheobronchial tree by releasing histamine in controlled amounts in response to physiological stimulation such as changes in serum pH, P_aO_2 , humidity and temperature.⁷

The preceding facts make it readily apparent that histamine release can go a long way toward explaining the clinical signs of diseases of immediate hypersensitivity such as urticaria, angioedema, and asthmatic bronchospasm. In the case of asthma, it has been known for many years that antihistamines are contraindicated for relief of asthmatic attacks because they dry bronchial secretions and do not inhibit one of the important chemical mediators, SRS-A, a potent broncho constrictor in man.^{3,5}

Slow Reacting Substance of Anaphylaxis

SRS-A chemically is a poorly defined substance resembling an acidic lipid. Brocklehurst compared the activity of SRS-A and histamine on perfused human lungs. During the first 3 minutes of perfusion, bronchospasm was predominantly due to histamine. After 8 minutes, bronchospasm was mainly caused by SRS-A and this effect was prolonged for hours.^{3,5} SRS-A probably exists in the target organ in the form of an inactive precursor of the final compound.

New Asthmolytic Drugs

(Disodium Cromoglycate & Diethylcarbamazine)

Austen has demonstrated in rats that diethylcarbamazine (Hetrazan) inhibits the release of SRS-A but not histamine. Earlier data had suggested that Hetrazan reduced the severity of concomitant asthma in humans treated for filariasis.^{8,9}

Disodium cromoglycate has the opposite effect of Hetrazan on sensitized rat mast cells as it inhibits release of histamine but not SRS-A. Disodium cromoglycate was synthesized by British pharmacologists from a plant derivative called Khellin. This compound seems to act by interfering with the synthesis or release of chemical mediators from sensitized cells.¹⁰ Disodium cromoglycate and diethylcarbamazine are being modified and they have been used experimentally for therapy of asthma since 1967. Disodium

cromoglycate is currently marketed in Great Britain and will be commercially available in the United States in about 12 months.

Other Chemical Mediators

Several other compounds have a much less well defined role as chemical mediators in human immediate hypersensitivity. *Serotonin* is a mediator of anaphylaxis in rodents but it does not appear to be involved in similar reactions in humans.⁵

The *kinins* are important mediators in inflammatory responses. *Bradykinin* is involved in angioedema but there is no definite evidence for its role in anaphylaxis or asthma.

The *prostaglandins*, one of the newest families of hormones, have attracted attention because of their widespread pharmacologic effects on smooth muscle.¹¹ Cuthbert, in England, administered prostaglandin E₁ by inhalation to asthmatics and he demonstrated this hormone had an ability to relieve bronchospasm. He found, by pulmonary function studies, that this hormone action was comparable to isoproterenol, but of a shorter duration.¹²

The action of SRS-A is not inhibited by antihistamines and it differs from bradykinin and serotonin in having no effect on the estrous rat uterus. SRS-A has no effect on isolated gerbil colon which shows that it is different from all prostaglandins. SRS-A contracts human bronchial muscle at a lower level of concentration than for any other species.¹⁴

Catecholamines are not generally considered as chemical mediators of immediate hypersensitivity. Epinephrine remains the main pharmacologic tool in combating severe manifestations of asthma, angioedema, and anaphylaxis. In recent years, some fascinating concepts have been advanced regarding the role of the autonomic nervous system in human asthma.

Role of Alpha and Beta Receptors in Asthma

Sutherland and Robinson, in 1962, discovered that the enzyme, adenylyl cyclase, was stimulated by epinephrine to catalyze the conversion of adenosine triphosphate (ATP) to 3'5' cyclic adenosine monophosphate.¹⁵

Szentivanyi, in 1968, proposed the beta adrenergic theory of bronchial asthma.¹⁶ To consider the mechanics of this theory, it is necessary to review the concept of neurotransmission. Epinephrine and norepinephrine are the most biologically important catecholamines. These

amines act on the alpha and beta receptor sites of the adrenergic system. Recent data suggests that there are two types of beta receptors called beta₁ and beta₂. The beta₁ receptors stimulate tachycardia and the beta₂ receptors mediate bronchodilatation.¹⁶ Human bronchiolar tissue has approximately 90% beta receptors and 10% alpha receptors.⁵ The alpha adrenergic system is a stress-defense mechanism whereas the beta adrenergic system is a relaxing mechanism. The alpha receptors are most responsive to norepinephrine while isoproterenol is the most potent beta stimulator. Epinephrine stimulates both the alpha and beta receptor sites.⁵

The beta receptor site is felt to be a lipoprotein substance called adenylyl cyclase.¹⁶ Isoproterenol and epinephrine stimulate adenylyl cyclase to catalyze the conversion of ATP to cyclic 3'5' AMP.¹⁶

Function of 3'5' Cyclic Amp

Cyclic AMP functions intracellularly by modifying enzyme activities and permeability barriers which inhibit mediator release from sensitized cells.

Figure II shows how the antigen-reagenic antibody complex induces the cell to release the chemical mediators histamine and SRS-A. Elevated levels of cyclic AMP will inhibit mediator release, while lowered levels will favor release of SRS-A and histamine.¹ This reaction takes place

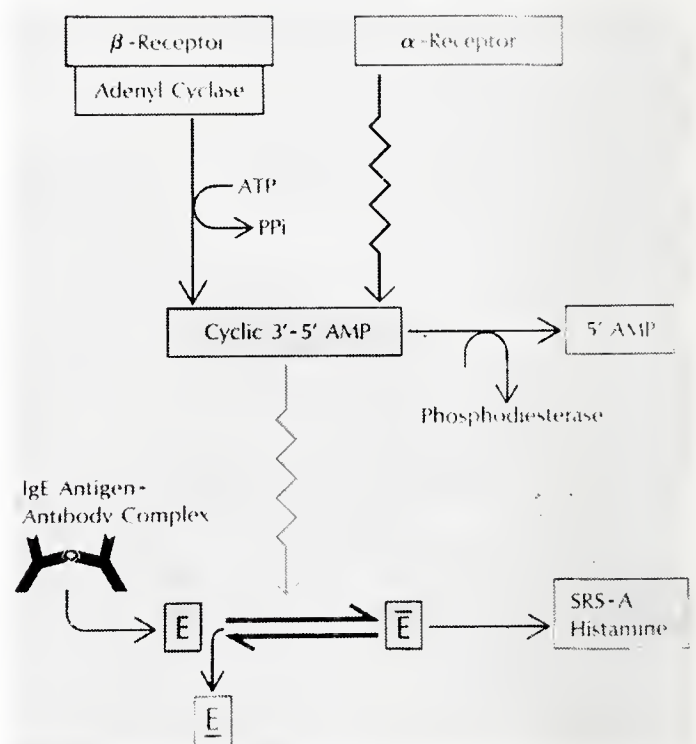


Figure II.
IgE Antigen-Antibody Complex Reaction Sequence Modulated by Cellular Cyclic-AMP Levels. (Reference 1. Courtesy of Sinauer Associates, Inc., Stamford, Conn., 1971.)

on the membrane of a sensitized cell. The beta-blocking agent propranolol prevents the stimulation of adenyl cyclase by epinephrine and causes bronchoconstriction.¹

The methylxanthine compounds such as aminophyllin are competitive inhibitors of phosphodiesterase, an enzyme which inactivates cyclic AMP. Thus, intracellular levels of cyclic AMP are increased in human leukocytes and allergic histamine release is inhibited.¹⁷

Beta Adrenergic Theory of Etiology of Asthma

The beta adrenergic theory regards asthma as a unique pattern of bronchial hyperreactivity to a broad spectrum of immunological, psychic, chemical and physical stimuli. The basic biochemical defect is a malfunctioning beta-adrenergic effector system due to an abnormal adenyl cyclase enzyme secondary to partial blockade, or normal adenyl cyclase synthesized in insufficient quantity.¹⁶

This concept places asthma in the category of an inborn error of metabolism which may account for the recurrence of asthma in family groups. Inadequate adenyl cyclase would also explain cases of intrinsic asthma in which hyperreactive airways undergo constriction due to infection. A recent study¹⁸ showed that adenyl cyclase activity was lower in a monozygous twin with asthma than in the non-asthmatic twin.

Although the adrenergic system is important in the pathogenesis of bronchial asthma, the role of the cholinergic system is unclear. Currently, there is no evidence to link asthma with the cholinergic system.

Present knowledge of the beta adrenergic theory of asthma has prompted a search for a substance which will selectively stimulate the beta₂ receptors of the lung while avoiding stimulation of the beta₁ cardiac receptors.

Salbutamol

Salbutamol is a beta adrenergic stimulator which is a strong bronchodilator used experimentally for asthma at a dosage level devoid of cardiac stimulation.

This drug may be given by aerosol or orally at a dosage of 2.5 mgs with a clinical effect in 15 minutes and a maximum response in 2 hours.¹⁹ Salbutamol is currently undergoing clinical investigation in Great Britain.

Conclusion

Hopefully, in the future, the chemist and pharmacologist will be able to give the clinician

drugs effective in inhibiting such chemical mediators as SRS-A or others not yet identified, the release of which precipitates diseases of immediate hypersensitivity.

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SURGERY at the UNIVERSITY OF ARKANSAS SCHOOL OF MEDICINE*

*Under the direction of Gilbert Campbell, M.D., Professor of Surgery.

Successful Resection of a Recently Symptomatic Traumatic Aortic Arch Aneurysm of 14 Years Duration

G. Doyne Williams, M.D.,* Jack L. Davis, M.D.,**
Ronald W. Baggett, M.D.,*** and Gilbert S. Campbell, M.D.****

Traumatic rupture of the aorta is increasing in frequency as a result of the rising number of high speed vehicular accidents.¹ Death occurs immediately in 80 to 90 percent of such patients, and of the initial survivors most succumb to secondary hemorrhage within one month.² Rarely, a long term survivor is encountered and we have recently resected a post traumatic aneurysm of 14 years duration. A review of the literature reveals nine additional such cases occurring 14 to 47 years following trauma.^{3,4,5,6,7,8,9} Eight of these cases were surgically corrected with one operative death.

Case Report

V. C. (Hospital Unit #35 14 62) a 47 year old Caucasian female was evaluated for chronic left substernal and interscapular back pain which had recently become quite severe. Physical examination was within normal limits and specifically, no cardiac murmurs or intrathoracic bruits were heard. The electrocardiogram was normal. Chest x-ray revealed a prominent aortic knob which on Barium swallow resembled an aortic isthmus aneurysm (Fig. 1). Subsequent aortogram confirmed the presence of an aneurysm which appeared to arise just distal to the origin of the left subclavian artery (Fig. 2). The faint outline of the normal aorta within the aneurysm suggested a complete aortic transection contained by enveloping false aneurysm. The patient had sustained severe injuries in an automobile acci-

dent 14 years previously, including fractures of the pelvis, ribs, and both lower extremities. No report regarding appearance of her chest x-rays at that time was available.

The lesion was exposed by a Barrett incision in the fourth left intercostal space. The aorta was encircled with umbilical tapes between the left carotid and subclavian arteries and immediately below the aneurysm. Femoral vein to

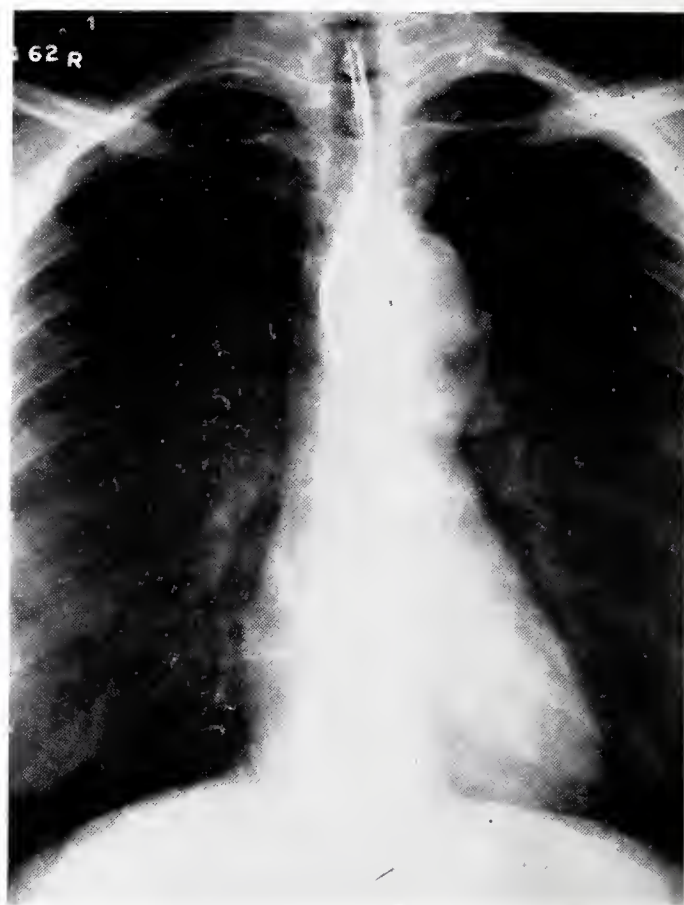


Figure 1.

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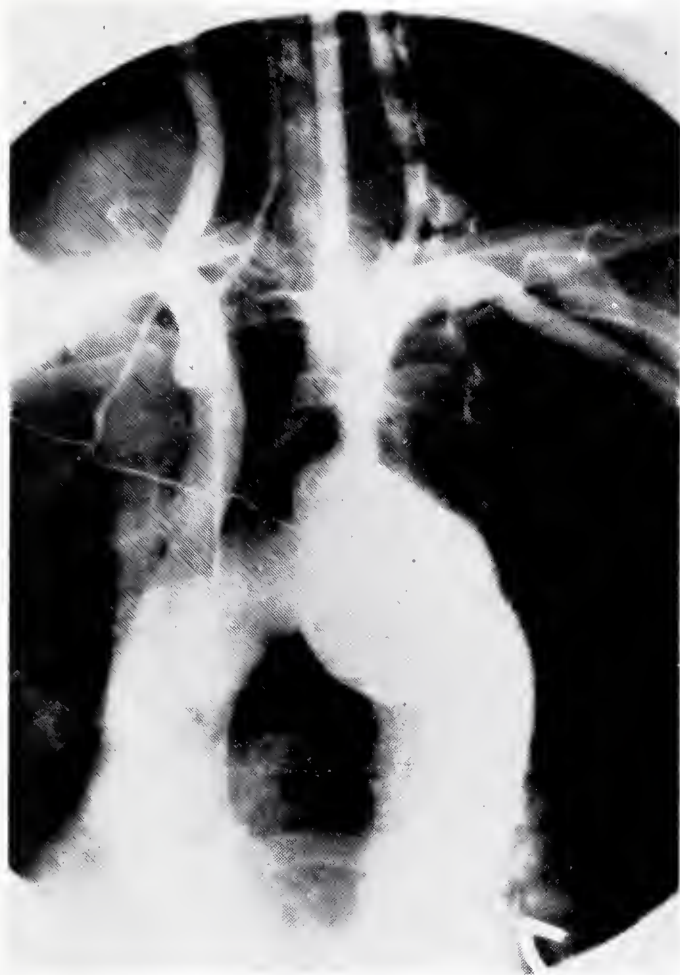


Figure 2.

femoral artery bypass was utilized with a Temp-trol disposable oxygenator in the circuit. This technique prevents proximal aortic hypertension with its attendant cardiac and cerebral problems and delivers oxygenated blood to the body distal to the aortic cross clamp. After partial cardiopulmonary bypass was established, the aorta was clamped above and below the aneurysm at the points of cord tape encirclement. The aneurysm was opened revealing a complete transection of the aorta just distal to the left subclavian artery origin (Fig. 3-A). The false aneurysm had eroded extensively into an adjacent vertebra and is the probable etiology of her severe pain. The aneurysm was then excised and replaced with a 30 mm. Teflon graft, 5 cm. in length (Fig. 3-B).

The post operative course was uncomplicated by renal or spinal cord problems and the patient was discharged home on the eighth post operative day. She has remained asymptomatic.

Comment

A case of traumatic aortic arch transection requiring resection 14 years later is presented to emphasize this diagnostic possibility when evaluating chronic chest complaints in patients with

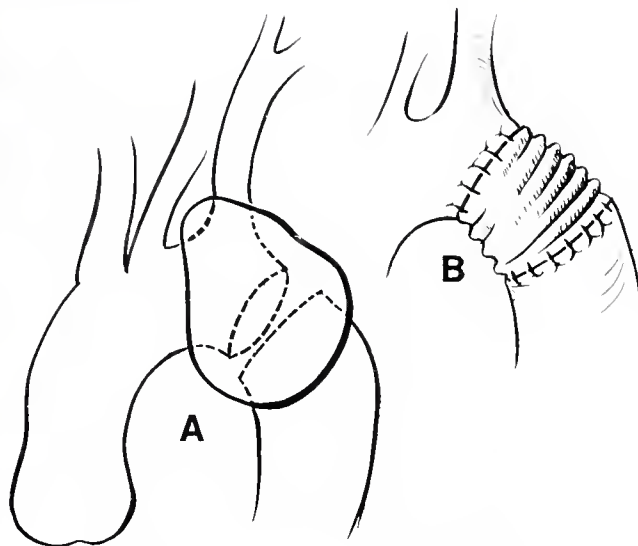


Figure 3A.

Figure 3B.

x-ray evidence of atypical aortic arch configuration and/or past history of deceleration type trauma. Procurement and meticulous evaluation of technically adequate x-rays of the chest in deceleration injured patients is imperative. Evidence of unusual aortic contours, widened superior mediastinum, deviation of the trachea to the right or depression of the left main stem bronchus should lead to immediate aortography.²

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ELECTROCARDIOGRAM

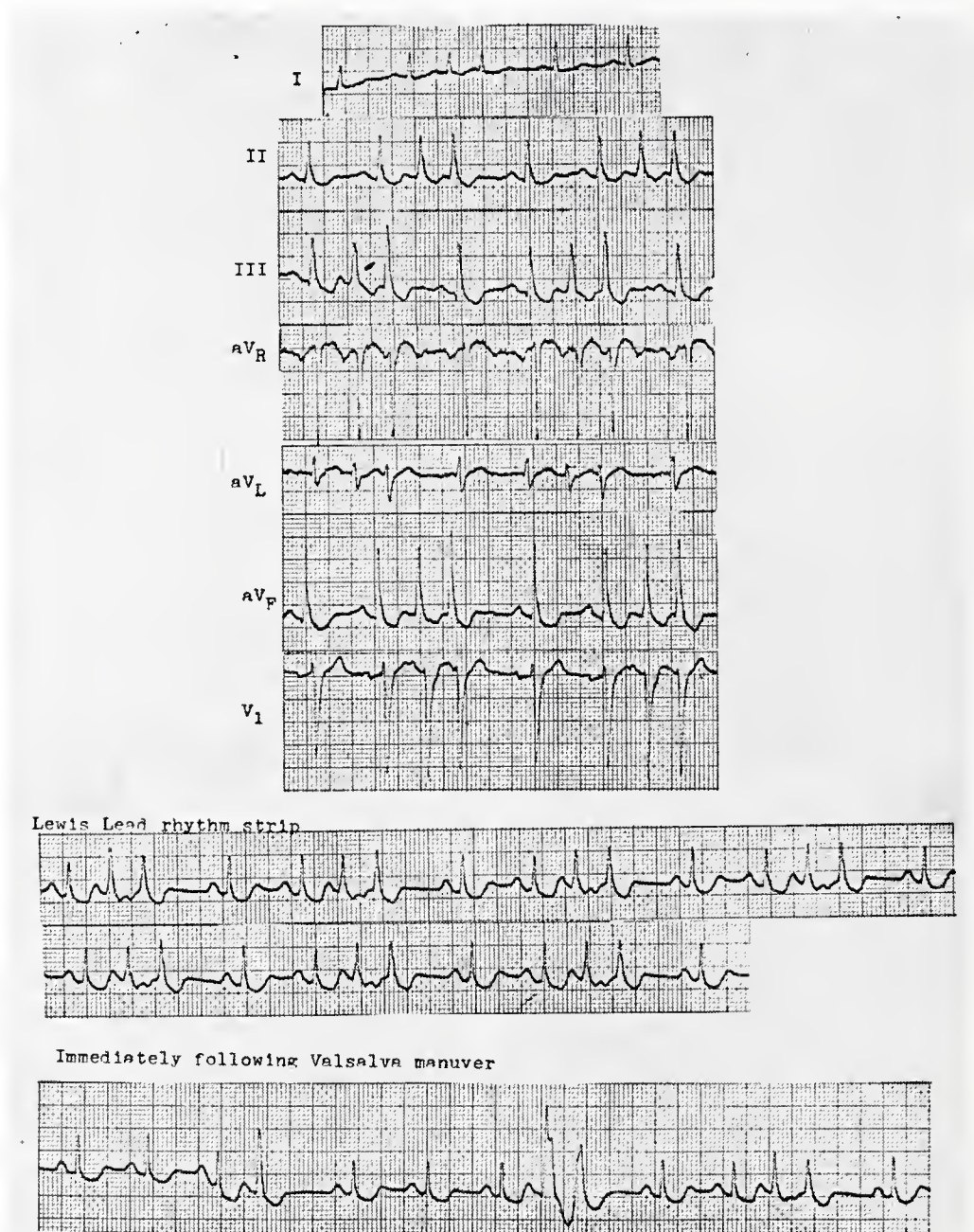


OF THE MONTH



T. G., 46-year-old veteran, January 25, 1972—Three-year history of hypertension, treated with thiazides and reserpine, admitted for evaluation of three-week history of weak and dizzy spells, particularly in upright position. Four days prior to this tracing he was found to have the same irregular rhythm and moderate postural hypotension. Although there were no clinical signs of heart failure, to attempt to control his arrhythmia he was digitalized over two days, and at time of this tracing was on maintenance digitalis 0.25mg/day.

(See Answer on Page 309)



The Department of Cardiology, University of Arkansas Medical Center
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Warnings: *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, then gradually withdraw. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between meprobamate, alcohol, and other CNS depressants or psychotropic drugs. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. Ani-

mal data at five times the maximum recommended human dose show reduction in litter size due to resorption. Meprobamate appears in umbilical cord blood at or near maternal plasma levels, and in breast milk at levels 2-4 times that of maternal plasma. *Children Under Six:* Drug not recommended.

Precautions: To avoid oversedation, use lowest effective dose, particularly in elderly and/or debilitated patients. Consider possibility of suicide attempts; dispense least amount of drug feasible at any one time. To avoid excess accumulation, use caution in patients with compromised liver or kidney function. Meprobamate may precipitate seizures in epileptics.

Adverse Reactions: *Central Nervous System:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe, rare hypersen-

sitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Hematologic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.

Usual Adult Dosage: 1200 to 1600 mg daily, in three or four divided doses; doses above 2400 mg daily not recommended.

Overdosage: Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

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EDITORIAL

The Faces of Russia

Alfred Kahn, Jr., M.D.

Half a world away from the U. S. A. lies the USSR, an enigmatic colossus to most Americans. Viewed at such a great distance, the formulation of some opinions about Russia is empiric and subject to the pitfalls of armchair reasoning. Even a brief visit to this complex country gives only the most superficial insight into Russian character and motivation — it is almost like trying to guess the pattern of a fabric from a few threads. Furthermore, regardless of the perspective or vantage point that the American visitor views Russia, he is subconsciously conditioned to interpret what he learns in light of two distasteful aspects of the Russian Government: a partial repression of individual freedom and initiative and an avowed desire to spread communism by peaceful or revolutionary means.

The biggest question confronting America today is whether or not we and the Communists can find a suitable accommodation to each other.

The Russian visitor alights at Shemesheyvo Airport expecting to find abundant evidences of repression of personal liberty and evidences of crusading, rampaging zeal in communizing the world. Neither of these facets of communism are apparent and in this respect, the visitor feels like he is totally in a vacuum. The most striking first impression is the variety of human habitus: there are blonde Scandanavian types; there are dark complexioned, smaller statured Turkish types; there are Teutonic faces; there are Asian faces; there seems to be no omission to this endless array of people. And herein, one cannot help but think in different clothes, could I distinguish these people from Americans; and the corollary quickly follows is not this hybridization

resulting from vast migrations through the crossroads of a great land mass, a source of energy and strength, again not unlike America.

These faces seem to have a smaller spectrum of emotion and there is a shift toward the somber — when viewed on the street; yet at night in a cafe, there is laughter, spontaneous singing, impromptu dancing, and thunderous applause for any sincere entertainment efforts. Does a bleak winter climate or do governmental controls produce a serious mien that is a facade hiding the usual gay end of the spectrum of human emotions? The only other difference in the appearance of our Russian counterpart is that his clothes have the appearance of those our lowest income working man wears rather than the median seen in the U. S. A. The austerity of dress does not imply lack of variety, but lower quality. Short skirts and the newest western European clothes styles were apparent everywhere — in addition to work clothes.

Consumer goods that are an American way of life were expensive and the level of quality again seemed below the U. S. median. The number of shops seems less than in the U. S. A. The effort to have attractive display windows was totally absent in some areas, but there were tasteful merchandise displays in the heart of Moscow as at GUM, the state owned store. GUM should be a must for every American; it is like a combination of Macy, Marshal Field, and Woolworth with the calendar turned back perhaps fifty years. It affords the easiest opportunity to see the variety of merchandise available to the Russian consumer; in general the prices were about like those in America but the quality was less

and the costs were very high for the wage scale of the average Russian (said to be \$150.00 per month plus social benefits). In context, considering the poverty of the bulk of the Russians before their revolution, these available consumer goods represent a vast improvement in the standard of living, and the improvement could obviously be more if the industrial effort were channeled more into consumer goods and less into the military.

The appearance of the Russian cities differs from America; they look older and dustier—despite an absence of trash on the streets. There are relatively few signs. There are areas of intense building activity, as of apartment buildings and some hotels. There are good restaurants with excellent food in Moscow and Leningrad. The historic sites are well cared for and it seems to be a real historic rarity that the current Russian Government should spend so much effort to preserve the historic landmarks and works of a government which they overthrew and to which they have antithetical views. The only conclusion that one can draw from this is that Russians love Russia as a homeland. Perhaps this reflects less self-orientation than one senses in America, perhaps the product of education—certainly not a fundamental human difference.

Musing retrospectively after a very superficial visit to a foreign culture such as Russia, one has to ponder over the contrast and similarities with America. The U. S. has been the acknowledged leader in the free world for the past twenty-five years; it has been a nation manifesting the same hybrid vigor of the Russians; it has been a country of great wealth and technical expertise in many fields. Now, we are challenged for world leadership by a people who lack our consumer goods, our political freedom, our sophistication of government, and our historic devotion to human individual rights. The Russians can match our technical excellence in weaponry, if not in consumer goods; they cannot match our mode of living or way of life in any other way. Does weaponry constitute the basis of world leadership? This observer, a citizen of the U. S. A. and a brief observer of the U. S. S. R., feels that the failure of the U. S. A. is one of salesmanship in selling our system of government—despite its faults. A foreigner visiting America and visiting the U. S. S. R. is bound to prefer the former, a

further proof is that wherever there lies a geographic boundary between communism and true democracy, physical barriers have to be erected to keep the Communists from leaving their homelands for our Western Democracies as demonstrated at East Berlin. Our superiority and true position of leadership ought to be based on our mode of life and government—not on threats and superior weaponry, which we need anyway in this changing world.



ANSWER—Electrocardiogram of the Month

The rhythm is irregular, but with a definite pattern. The Lewis Lead rhythm strip permits best analysis of the relation of the P waves to the QRS. In this particular situation the negative electrode was placed in the patient's supra-sternal notch, and the positive electrode at his ensiform process. This is a lead system similar to aV_F , but often more sensitive to P waves than either lead II or aV_F . This patient's rhythm had a basic sinus rhythm pattern interrupted by triplets. The first beat of each triplet appears to be a sinus beat also. The second beat of the triplet, however, is associated with a slightly different shaped P wave, and an abbreviated PR interval. This may represent an ectopic atrial pacemaker near the A-V conduction system. The third beat in the triplet is preceded by a totally different P wave, and a more prolonged PR interval. This beat probably represents an echo beat with retrograde atrial and antegrade ventricular conduction. Although digitalis may sometimes be effective in the treatment of this type of rhythm disturbance, it more often is not, and may actually compound the problem, leading to a reciprocating supraventricular tachycardia—the mechanisms leading to the production of the 3rd beat in the triplet persisting to produce 4th, 5th, etc., beats at a rate of 140 to 180/min. The premature atrial beat—the 2nd of the triplet—is probably the trouble maker, and if it can be suppressed, e.g., with quinidine, may eliminate the arrhythmia altogether.

This patient's response to valsalva adds further indication for withholding digitalis, and considering quinidine. Probably through vagal mechanisms the echo beat is blocked after the premature atrial beat—the 4th beat in this rhythm strip—but subsequently two markedly aberrant beats appear. Such an unstable condition may be a clue to this patient's bouts of dizzy and weak spells.

In addition the patient does have an abnormal ST-T wave which probably reflects left ventricular, inferior wall ischemia, inasmuch as these findings were present prior to digitalization.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The Price Commission restricted increases in a physician's fees to 2.5 per cent a year when justified by increases in his costs, but granted the right of appeal to the Internal Revenue Service for a further increase for those physicians with greater increases in their costs of conducting a practice.

The official regulations went into effect Dec. 29, a day before they were published in the Federal Register. The commission earlier had announced guidelines on which the regulations were based.

The regulations require that a physician maintain a schedule of fees and increases with a sign in his office that such a schedule is available for inspection. But he does not have to post them in his office.

After issuance of the regulations, AMA officials continued meetings with Federal officials in efforts to effect modifications of provisions considered unfair to physicians. The meetings started before issuance of the guidelines.

One meeting was with Donald Rumsfeld, director of the President's Cost of Living Council, a few days before the regulations were issued. Dr. Max H. Parrott, chairman of the AMA Board of Trustees and head of its delegation, voiced strong exceptions to some of the price control provisions which would deny treatment equal to that given other providers of professional services.

The Price Commission has ruled that "a non-institutional provider of health care services may charge a price in excess of the base price only to reflect allowable costs in effect on Nov. 14, 1971, and allowable cost increases incurred after Nov. 14 reduced to reflect productivity gains, and only to the extent that such increased price shall not result in an increase in such provider's profit margin as a percentage of revenues, before income tax, over that prevailing in the base period, providing, however, that the provider's aggregate price increases shall not exceed 2.5 per cent per year."

The AMA has pointed out that the Price Commission's 2.5 per cent limitation on the increase of physicians' fees was discriminatory inasmuch as other providers of services could reflect actual increases in cost by a "pass through" of such costs, a procedure denied physicians under the proposed regulations.

The AMA also pointed out that while the Price Commission urged increased productivity, the proposed regulations might well decrease productivity.

The physician cannot generally work longer hours than he is presently working, the AMA position paper said. He can expand his office space, purchase new testing and diagnostic aids, and employ more staff.

But held to a 2.5 per cent fee increase — in the face of higher costs . . . he is apt to do none of these things.

The AMA paper also took exception to the proposed requirement for the posting . . . or having available . . . a fee schedule. It is simply not practical for a physician to arrive at a schedule of prices for each and every one of the numerous services he renders, the AMA said, pointing out that it was its understanding that the Committee on Health Services Industry . . . an advisory body to the Price Commission . . . recognized this fact and had recommended that posting be limited to institutional providers.

The AMA also pointed out that the proposed guidelines do not provide for a procedure under which physicians whose fees are below the norms in their communities may adjust their fees. Physicians usually maintain their fees for several years and then increase them by ten or twenty per cent to counter inflation, rather than impose annual increments of 25 or 50 cents, the AMA said, insisting that the proposed regulations should contain reasonable criteria for handling unusual situations such as these.

At the suggestion of Mr. Rumsfeld, the AMA has taken its case directly to C. Jackson Grayson, Jr., chairman of the Price Commission and addi-

tional meetings have been scheduled. The full text of the AMA's position paper on this subject has been forwarded to all state medical societies.

* * *

President Nixon signed into law a sharply stepped-up program to combat cancer.

In signing the legislation before several hundred leaders in the field at a White House ceremony, Nixon expressed "hope that in the years ahead we will look back on this as the most significant action taken during this administration."

The new law, which authorizes expenditure of \$1.6 billion in the next three years, gives the National Cancer Institute partial autonomy and puts it to a large extent under the White House although it remains in the National Institutes of Health.

Its chief will be appointed by the President, its activities monitored for the president by a special three-man advisory board, and its budget submitted directly to the White House.

Nixon predicted the new organizational setup "will enable us to mobilize far more effectively both our human and our financial resources in the fight against this dread disease."

The revamped organizational structure is a compromise between proposals to establish a separate, wholly independent cancer authority under the White House and to leave NCI in NIH but with a greatly expanded program.

The main thrusts of the new cancer research program are being developed by a committee of 280 nongovernment scientific consultants and will be completed by March.

The prime goal will be to find drugs that are effective against "slow growing" tumors—malignancies that effect such organs as the lung, breast, colon and bladder and account for 85% of the 650,000 new cancer cases a year.

The Cancer Institute plans to organize "task forces" to launch a coordinated attack against specific forms of cancer, including lung, bladder, prostate and large bowel. This approach is credited with achieving substantial success in treating childhood leukemia.

The President also signed into law a \$673.6 million bill financing continuance of the federal government's programs to aid medical, dental, nursing and allied health schools. It was about \$150 million more than the administration requested, but \$200 million below the figure ap-

proved by the senate. Medical and dental schools were allotted \$460.4 million, compared with the administration's request for \$366 million. Nurses got \$145 million.

Rep. Paul Rogers, (D., Fla.), head of the House Health Subcommittee and other lawmakers confidently predicted more money would be forthcoming when congress returns next year.

* * *

An American Medical Association spokesman said a solution to the medical malpractice problem must be found "which will provide equitable protection for the patient and the physician and which will not contribute unreasonably to the cost of medical care."

Dr. Arthur J. Mannix, Jr., of New Rochelle, N. Y., outlined the AMA's position at a hearing of the government's special commission of medical practice. Dr. C. A. Hoffman, AMA president-elect and chairman of the AMA Professional Liability Committee, is a member of the Commission.

"The physician should be permitted to treat his patient in an atmosphere of mutual trust and confidence, without continual threat of malpractice charges," Dr. Mannix said.

Some means must be found which will provide equitable protection for the patient and the physician and which will not contribute unreasonably to the cost of medical care. The physician should be permitted to treat his patient in an atmosphere of mutual trust and confidence, without continual threat of malpractice charges.

New systems, perhaps one based on scheduled benefits, or a system of limited and well-defined "no fault" coverage may be the answer. We recognize that many questions will have to be considered when any major change is contemplated. Will the patient population, for example, be willing to yield its rights to adversary litigation as they know it now? In the interests of reduced medical care costs, would they accept, as another example, scheduled compensation perhaps limiting recovery to economic losses? In any event, any viable solution will have to be based on acceptance by the public.

"We believe that additional experimentation with a variety of means may lead to a more satisfactory resolution of the problems facing us. The physicians of this country would welcome measures alleviating the many problems present today in the practice of medicine as it relates to mal-

practice liability. . . . The American Medical Association offers to this Commission its assistance as solutions are sought to this complex problem."

Dr. Mannix outlined the AMA's activities in the field which culminated in the negotiation of a contract with CNA as insurance carrier and Marsh and McLennan as national administrator for the establishment of sponsored malpractice insurance in states which do not have them.

* * *

The American Medical Association opposed further government restrictions on barbiturates.

Dr. Henry Brill, a member of the AMA's Committee on Alcohol and Drug Dependence, pointed out to the Senate Juvenile Delinquency Subcommittee that barbiturates and other sedative drugs already are subject to tight controls under a federal law — penalties for illicit sale, restrictions on refilling of prescriptions, and mandatory registration by physicians who prescribe or dispense them.

"To add to the present restrictions on barbiturates so as to reduce medical overuse would be a disservice to patients who need them," Dr. Brill said. "Not only would it be more difficult to prescribe and administer such drugs in the treatment of numerous illnesses and disease, it would inevitably raise the costs of hospital care in direct proportion to the additional record keeping and reporting that would be required of these institutions, where so great a proportion of sedatives are used in therapy.

"On the other hand, we vigorously support efforts to control street traffic and diversion of drugs. We also subscribe to and support the intensification of education and persuasive techniques to help assure the proper utilization of these drugs in medicine. We would urge medical schools to incorporate comprehensive material on drug abuse and drug dependence in their curriculums, stressing the importance of an accurate assessment of the abuse and dependence potential of patients when psychoactive drugs are medically indicated. Continuing education efforts should stem largely from drug utilization committees in hospitals where both the medical staff and house officers, together with nursing personnel, can benefit from an ongoing evaluation of prescribing practices."

* * *

The federal government reported at the end

of 1971 that outbreaks of influenza were hopscotching across the country in a fashion typical of the 1969 epidemic that struck an estimated 30 million Americans.

The National Center of Disease Control (NCDC), a part of the Department of Health, Education and Welfare with headquarters in Atlanta, Ga., said some of the influenza had been identified as the Hong Kong variety and some as "influenza-like." School absenteeism ranging as high as 30 per cent was reported by communities hardest-hit by the bug.

The influenza struck swiftly and spread rapidly. Practically no outbreaks were reported by state health departments in a telephone survey conducted by the NCDC on Nov. 17-18. But another phone survey conducted Dec. 21 revealed outbreaks in New England, the middle Atlantic states, midwest, south and the far west. The Hong Kong influenza "has been documented in Connecticut, Kansas, Michigan, New Jersey and Utah," the NCDC said.

"Increased influenza-like disease has been reported from Colorado, Idaho, Indiana, Louisiana, Maine, Massachusetts, Montana, New Mexico, Oregon, South Dakota and Wyoming," the center said.

The disease was reported to have caused mild symptoms in its victims.

The World Health Organization said that influenza epidemics, much of it caused by the Hong Kong virus, have broken out in both eastern and western Europe.

* * *

Thirty-seven states and the District of Columbia were given until Feb. 1 by the Department of Health, Education and Welfare to improve what was termed "substantial deficiencies" in their standards for nursing homes.

"Unless such improvements are validated by the Feb. 1 target date, HEW intends to initiate a . . . procedure that could ultimately result in withholding all federal medicaid funds from any or every one of the 38 states," HEW Secretary Elliot L. Richardson said.

He referred to such standards as fire, sanitation, safety and medical services that are substandard in 37 states and the District of Columbia.

Richardson told the White House Conference on Aging that the deficiencies were found in a survey undertaken at President Nixon's request

and completed Nov. 15. He said the 38 states jurisdiction had been notified of the survey results. They are:

Arkansas, California, Connecticut, District of Columbia, Delaware, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Montana, Nevada, North Carolina, North Dakota, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, Wisconsin, West Virginia and Wyoming.

* * *

The Justice Department proposed production quotas to cut by 40 per cent the amount of amphetamine and methamphetamine manufactured by U. S. drug companies in 1972.

Attorney General John N. Mitchell said the Bureau of Narcotics and Dangerous Drugs (BNDD) proposed to limit production of amphetamine to 5,870 kilograms and methamphetamine to 2,782 kilograms — an approximate 40 per cent cut from 1971 production and a 70 per cent cut from what was requested by drug companies.

Mitchell said 9,356 kilograms of amphetamine and 4,926 kilograms of methamphetamine will be produced this year. The drugs are used to treat narcolepsy, a form of sleeping sickness, and hyperkinesis, a form of hyperactivity found in children. They also have been used widely for treatment of overweight, although such use is questionable.

BNDD has estimated that large amounts of the legally produced drugs have been diverted into the illicit drug traffic.

The 40 per cent production cut was recommended by the Department of Health, Education and Welfare. The proposed quota is the first time the government has used this authority under the 1970 Drug Abuse Prevention and Control Act. Manufacturers had 30 days to contest the action before it took effect.

Legal use of amphetamines could be curtailed as the result of a current Food and Drug Administration evaluation study of their effectiveness as a weight-reducing drug. The study will take two to six months, but the FDA already has ordered the amphetamine manufacturers to submit additional proof of effectiveness because of critical conclusions by the National Academy of Sciences.

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, January 9, 1972, in the Coachman's Inn, Little Rock. Present were: Long, Applegate, Shuffield, Saltzman, Shorey, Fairley, D. Gray, Bell, Irwin, Duzan, Wynne, Harris, Bethel, Kolb, Orr, Kirby, Henry, Koenig, Fowler, Thomas, Hyatt, Whittaker, Norton, Verser, Chudy, Wilkins, J. A. Harrel, Harry Hayes, Purcell Smith, A. C. Bradford, George Mitchell, Charles Silverblatt, Kemal Kutait, Mr. Sam McGuire, Mr. Paul Harris, Mr. Warren, Mr. Rainwater, Mr. Schaefer, and Miss Richmond.

The Council observed a moment of silence in memory of Wayne Lazenby, who had served as councilor for the fourth district.

The invocation was given by Lewis Hyatt.

Chairman Long introduced the guests present and called on Mr. Schaefer for an introduction of the Society's new staff member. Mr. W. Paul Rainwater joined the staff of the headquarters office on November 1, 1971, and will work principally in the area of public relations and liaison with committees and county societies.

The Council transacted business as follows:

1. J. A. Harrel, Director of Health for the State, spoke briefly expressing a desire to work closely with the Society and requesting Society support of the State Health Department.

2. Chairman Long announced that Governor Bumpers had appointed Elvin Shuffield to the State Medical Board, replacing William A. Snodgrass who resigned.

3. Upon the motion of Koenig and Bethel, the Council approved the following actions of the Executive Committee:

- A. Scheduling of the 1973 Annual Session for April 1-4 at the Arlington Hotel in Hot Springs;

- B. Designating "Medical School Committee" headed by Ross Fowler to serve as liaison with James L. Dennis, University Vice President for Health Sciences.

- C. Directing that a letter of commendation be written to John Herron commending him for his many years of service with the Public Health Department.

- D. Appointing Raymond Irwin as the Society's representative on the Board for the Arkansas Health Systems Foundation.

4. Chairman Long requested nominations for

an alternate representative for the Arkansas Health Systems Foundation. Payton Kolb was nominated by Stanley Applegate and elected by acclamation.

5. Chairman Long discussed the scheduling of a meeting by the Anesthesiologists in Little Rock in May of 1972. He called this to the attention of the Council as an example of fragmentation of organized medicine and recommended that officers of the Society encourage their own specialty groups to work their programs in with the Society's annual convention so that the groups may be kept close to the Medical Society for their mutual benefit.

6. Payton Kolb reported on a meeting of the American Medical Association Council on Mental Health, which he had attended as a representative of the Society. He reported that national health insurance was the major topic, stressing that both the AMA Council and the American Psychiatric Association feel that whatever plan is proposed should provide the same coverage for psychiatric illness as is provided for any other type of illness.

7. Raymond Irwin reported on the workshop on regulations of the Joint Commission on Accreditation of Hospitals, which was co-sponsored by the Society and the Hospital Association. He mentioned that the conference dealt with the fact that in the past there had not been enough emphasis on control of quality of care. Under the new regulations of the Commission, responsibility for quality control will be delegated to the hospital's organized staff, with the hospital staff accountable to the hospital's board. Dr. Irwin indicated that many hospitals would have to rewrite their medical staff by-laws and that a guideline for revision had been issued to all hospitals. He urged all physicians to see that hospitals do comply—pointing out that it is the physician's quality control which is involved.

8. Charles W. Silverblatt, Coordinator of the Arkansas Regional Medical Program, advised the Council that an allocation of \$75,000 was included in the contract of the Arkansas Health Systems Foundation for the development of some type of mechanism for quality control and that they hoped the Medical Society would make use of the funds.

9. In response to an inquiry from the American Medical Association, the Council voted to endorse the nomination of Mrs. Jeanette Rocke-

feller for the "Citation of a Layman" award of the AMA. Motion for endorsement was by Koenig and Saltzman.

10. The Council approved the following appointments:

A. E. Stewert Allen for a position on the Board of the Arkansas Family Planning Council. Motion for approval was by Kolb and Koenig.

B. Upon the motion of Saltzman and Koenig, the Council approved the following appointments to the Second Councilor District Professional Relations Committee:

C. W. Jackson, Judsonia, Chairman

Jim Lytle, Batesville

Charles F. Wells, Morrilton

11. Stanley Applegate, Society president, spoke briefly regarding plans for the 1972 Annual Session. He recommended that the Council authorize the Society's underwriting up to \$2,000 for a possible deficit for entertainment at the Monday night party during the 1972 meeting. Upon the motion of Henry and Saltzman, the Council approved the Society's underwriting entertainment expenses for the dinner show at the Vapors in an amount up to \$2,000 if, because of poor attendance, the established dinner-show price fails to produce sufficient revenue to cover cost of the entertainment.

12. Chairman Long advised the Council that the Ohio State Medical Association had requested the Society's endorsement of its proposed legislation, H.R. 7182, for establishment of Professional Standards Review Organizations under Medicare and Medicaid. The legislation limits qualifications for PSRO to medical associations. Saltzman moved that the Council give its endorsement to H.R. 7182. Upon second by Irwin, the Council so voted.

13. Chairman Long reported that Guy Farris, chairman of the Hospital-Insurance-Physician Committee had suggested having the Society's Professional Services Review Organization designated as ex-officio members and consultants to the HIP Committee to assist in adjudication of commercial insurance carrier claims payments on a usual, customary and reasonable basis. There was considerable discussion concerning the Professional Services Review Organization's ability to serve effectively without statistical data on usual, customary and reasonable fees. Upon the motion of Koenig and Wynne, the Council voted

to request that the Society's PSRO consult with the HIP Committee as needed and that the PSRO be given whatever assistance is available to help them function effectively.

14. The Council voted, upon the motion of Orr and Kolb, to authorize expenses for the chairman of the Medicine and Religion Committee to attend a conference in Chicago in February.

15. Chairman Long advised the Council that Charles F. Wilkins had been appointed chairman of the committee to study the desirability of hiring a public relations firm, with Bascom P. Raney and A. C. Bradford serving as members of the committee. Dr. Wilkins reported to the Council on the committee's study and recommended that the Society not employ a public relations firm. Henry moved that the Council approve the recommendations of the Committee (see attachment). Kolb moved amendment to the motion to commend the committee for its excellent report. Upon second by Wynne, the Council so voted.

16. James C. Bethel reported to the Council on the recommendations of his committee's study on reorganization of the Society. Elvin Shuffield moved that the Council approve of the ideas presented by Dr. Bethel's committee and refer them to the proper committees of the Society for consideration. Second was by Kolb and the Council so voted. (See report by Dr. Bethel.) (See supplement to Council Minutes of February 6, 1972, for Committee Recommendations, page 322.)

17. Harry Hayes reported for the Insurance Committee on two items referred to the committee:

A. Malpractice. He reported that some progress had been made in negotiations with the American Medical Association on the AMA-CNA malpractice insurance program. Dr. Hayes advised the Council that an agency had approached him about being considered as administrator for the program and he questioned whether the Council wished to reconsider its action of August 8, 1971, in naming Rather, Beyer and Harper as state administrator for the program. Upon the motion of Saltzman and Orr, the Council voted to sustain its action of August 8, feeling that it was important to have the

administrator an agency with which the Society had a working relationship.

B. Hospitalization. Dr. Hayes reported that he had contacted Blue Cross-Blue Shield regarding the rate structure for the present group plan and that he had been in touch with representatives of Travelers and Mutual of Omaha regarding possible group plans for the Society. He reported that neither Travelers nor Mutual of Omaha was interested in offering a group plan for Society members. His report was received for the information of the Council.

18. The Council considered a listing of twenty-one questions from the Union County Medical Society concerning ethics, peer review, etc., and approved answers to the questions. (See attachment)

19. Chairman Long and Mr. Schaefer discussed briefly the recent establishment of foundations by many medical associations. Upon the motion of Orr and Henry, the Council voted to appoint a committee to use whatever method they feel desirable to investigate the advisability of the Arkansas Medical Society establishing a foundation. The committee was directed to consult with the Society's legal counsel in working up some basic ideas for drafting of a proposed constitution and by-laws to be used if a foundation is established.

20. Chairman Long presented a proposal from International Travel Advisors, Inc., for Society participation in its travel program. The Council voted, upon motion of Wynne and Koenig, to approve Society participation in the program.

21. H. W. Thomas reported that members in the fourth councilor district had proposed the name of John Pelham Burge of Lake Village to fill the unexpired term of Dr. Lazenby as councilor for the fourth district. Upon motion of Irwin and Orr, Dr. Burge was unanimously elected to the position of councilor.

22. Dean Shorey called the attention of the Council to the fact that a Medical Center faculty member had been named one of the National Junior Chamber of Commerce's "Ten Outstanding Young Men of America". Upon motion of Wynne and Henry, the Council voted to send a letter of commendation to the recipient—Dr. F. H. Roy, Sr.

23. Upon the motion of Orr and Koenig, the Council voted to authorize expenses for Dr.

Chudy and Dr. Wilkins to attend a regional conference for speakers and vice speakers of the house of delegates of state medical societies.

The meeting adjourned at 3:00 P.M.

APPROVED: C. C. Long, M.D.

Chairman of the Council

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**SUPPLEMENT TO COUNCIL MEETING
REPORT OF COMMITTEE TO STUDY
HIRING OF PUBLIC RELATIONS FIRM**

Dr. Charles F. Wilkins, Jr., Chairman

As instructed by the Council, the Committee to consider the advisability of the Arkansas Medical Society retaining the services of a professional public relations firm met at 10:00 A.M. on January 9, 1972, at the Coachman's Inn, Little Rock. The committee appointment resulted from the concern over the "doctors' image" which was expressed by Dr. Joe Verser and his suggestion that the Society consider using the services of a public relations firm.

Dr. A. C. Bradford and Dr. C. F. Wilkins attended the meeting. Dr. B. P. Raney did not attend. As a preliminary, surrounding state societies were asked for their experience. Replies were received from Missouri, New Mexico, Oklahoma, Tennessee and Texas. Prior letters were available from Kansas and Mississippi. Uniformly, these societies do not employ a public relations firm. Four had tried and abandoned such arrangements. All others had considered and rejected such programs.

Basically, the problems are three:

- (1) an adequate public relations program is expensive; an economy version is not effective and the public relations funds could be better used elsewhere;
- (2) public relations for a medical society is specialized field with understanding of the issues, problems, challenges and viewpoints of the profession needed;
- (3) no one can tell the story of the Society as well as the Society itself and such a program is best carried out by the Society.

I have copies of the letters from all of these societies and I will be happy to furnish copies of them to anyone who wishes to see them. They are quite lengthy and point out the many problems that are present.

After consideration and discussion, the committee members present do not recommend the employment of a professional public relations

firm.

The committee does have certain recommendations. We would define public relations as the maintenance of favorable public opinion. This must be obtained through the services of our local societies and their members, the Council, the Executive Committee and the administrative staff.

The Auxiliary to the Medical Society should be utilized to carry on a directed, continuing positive program in public relations at the local level. This is perhaps an untapped reserve of workers.

We recommend that the Council and the House of Delegates appropriate sufficient funds to enable the staff to obtain such professional public relations assistance and advice as is necessary in carrying out an effective program at the state and local level.

* * *

**SUPPLEMENT TO COUNCIL MINUTES
UNION COUNTY MEDICAL SOCIETY QUESTIONS**

QUESTION NO. 1: Is there, within the structure of the Arkansas Medical Society, a means of securing guidance in matters of medical ethics as they relate to third party factors in medicine?

QUESTION NO. 2: If so, would you please state the means?

ANSWER: (APPROVED BY THE COUNCIL AS PRESENTED). Chapter XII, By-Laws, Arkansas Medical Society: "The Principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relation to each other and to the public."

Chapter VII, By-Laws, Arkansas Medical Society (Council): Section 3. "The Council shall be the executive body of the House of Delegates and between annual sessions shall exercise the power conferred on the House of Delegates by the Constitution and By-Laws. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies, on which an appeal is taken from the decision of an individual councilor."

Chapter XI, Section 11(A), American Medical

Association Constitution: "(1) The judicial power of the Association shall be vested in the Judicial Council, whose decision shall be final; (2) The Council shall have original jurisdiction in . . . (b) all controversies arising under this Constitution and By-Laws and under the Principles of Medical Ethics to which the American Medical Association is a party; and (c) controversies between two or more state associations or other members and between a state association and a component society or societies of another state association or associations of their members. (4) The Council shall have jurisdiction on all questions of medical ethics and the interpretation of the Constitution, By-Laws and rules of the Association."

QUESTION NO. 3: Has the AMA outlined an ethical policy to which we should adhere in matters involving third parties?

QUESTION NO. 4: If so, would you please define or direct us to the policy definition?

ANSWER: (by Secretary of the AMA Judicial Council, Mr. Edwin J. Holman, APPROVED BY THE COUNCIL AS PRESENTED). Section 7, Opinion No. 9 on page 41 of the Judicial Council Opinions and Reports states as follows: "In 1934 the House of Delegates declared that 'One of the strongest holds of the profession on public approbation and support has been the age-old professional ideal of medical service to all, whether able to pay or not. That ideal is basic in our ethics.'

"The medical profession cannot dictate to patients how they shall finance their medical bills. The medical profession must oppose any prepayment or postpayment program that might result in advertising or solicitation of patients by physicians, profit to the physician for other than professional services, exploitation of the patient, or unnecessary increase in the cost of medical care. Any proposed program for financing medical care or parts of medical care, should be judged by the physician in light of the above criteria."

QUESTION NO. 5: Does the physician ethically abandon his obligation of discretion in management of information obtained from a patient during a therapeutic confrontation, even if the patient should sign a release in order to secure Medicare or other financial assistance related to illness?

ANSWER: (APPROVED BY THE COUNCIL AS PRESENTED). Section 10, Code of

Ethics, AMA, Opinion No. 10, page 63 of Opinions and Reports: "Disclosure of information to Insurance Company Representative. History, diagnosis, prognosis, etc., acquired during the physician-patient relationship may be disclosed to an insurance company representative if patient has consented to the disclosure. As recognized in Section 10 of the Principles, a physician's responsibilities to his patient are not limited to the actual practice of medicine. They also include the performance of some services ancillary to the practice of medicine. These services might include certification that patient was under the physician's care and comment on the diagnosis and therapy in the particular case."

QUESTION NO. 6: Should we consider an informational release valid if the release should be a compulsory portion of an application for Medicare benefits?

ANSWER: (by Society's legal counsel, Mr. Eugene Warren, APPROVED BY COUNCIL AS PRESENTED). "The release is valid even though the release is required in an application for benefits. The benefits would constitute the consideration for the execution of the informational release."

QUESTION NO. 7: If a release of information should be signed by a relative or friend of an incompetent person, such as an elderly, comatose patient, should the release be considered valid?

ANSWER: (by Society's legal counsel, APPROVED BY COUNCIL AS PRESENTED). "A release of information signed by a relative or a friend of an incompetent person is not valid."

QUESTION NO. 8: Would you please guide us in locating the ethical code basis for our submitting to lay judgment of the appropriateness of efficacy of our therapeutic regimens as a means of awarding our patients or ourselves a fee for service?

ANSWER: (by Secretary of AMA Judicial Council, APPROVED BY COUNCIL AS PRESENTED). "This question confuses the purpose or function of the lay judgment in determining the amount of money to be paid for medical care under an appropriate insurance policy or pursuant to a government program. The judgment of the third party (it is not always—nor is it usually a "layman's judgment") does not relate to the appropriateness or efficacy of the therapeutic regimen established by the physician, but

rather to an interpretation of the specific provisions of the policy in applying them to the facts presented in each individual claim. What is awarded is not a fee for service, but the amount of indemnity provided under the terms of a contract of insurance."

QUESTION NO. 9: Do not the Principles of Medical Ethics specifically forbid us to claim a fee based in efficacy of treatment in contrast to a fee based in the delivery of a medical service?

ANSWER: (by Secretary of the AMA Judicial Council, APPROVED BY COUNCIL AS PRESENTED). "Efficacy of the treatment provided is one component element of the services rendered by physicians for which a fee may be charged. Section 7 of the Principles of Medical Ethics states as follows: 'In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.'"

QUESTION NO. 10: Has there been a revision of the statement of the Judicial Council of the AMA that the only body competent to adjudicate a fee dispute between a physician and a patient is the physician's county medical society?

ANSWER: (by Secretary of the AMA Judicial Council, APPROVED BY COUNCIL AS PRESENTED). "No, the statement is still accurate and in effect. Since the question seems to be related to third party situations, perhaps there is some confusion on the matter of a *fee* dispute between physician and patient, and a dispute relating to the amount of indemnity provided to an insured under an insurance contract or pursuant to a government program. The latter does not control the amount of fee which a physician is due from his patient. In some jurisdictions, the physician obligates himself to a limited fee schedule for patients who are insured by a particular insurance company."

QUESTION NO. 11: If a guideline or other type of regulation of a Federal agency should require action on the part of a physician which is in conflict with the laws of his State, should

the physician abide by the directive of the Federal agency or should he obey his State's laws?

ANSWERS: (by Society's Legal Counsel, APPROVED BY COUNCIL AS PRESENTED). "A physician should obey the laws of the State; however, he should consult an attorney to determine whether there is in truth a conflict between the laws of the State and a regulation of a Federal agency. If the Federal regulation has the force and effect of statutory law, it is possible that under the supremacy clause the Federal regulation would supplant State law."

(Preamble—Code of Ethics, AMA) APPROVED BY COUNCIL AS PRESENTED. "These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public."

(Preamble, Code of Ethics, AMA, Opinion No. 5, page 2, Opinions and Reports) APPROVED BY COUNCIL AS PRESENTED. "... "Ethical pronouncements of the Judicial Council and the House of Delegates should not be so interpreted, construed or applied as to encourage conduct which violates a valid law."

QUESTION NO. 12: Whereas, the Arkansas Medical Society has agreed to use its legal staff power to assist a patient in certain types of fee disputes which might involve the "usual, customary and reasonable" policies of Arkansas Blue Cross-Blue Shield, has the Society made a similar offer to assist its member-physicians in such disputes?

ANSWER: (ADOPTED BY THE COUNCIL, UPON MOTION OF KOENIG AND HENRY). The consultative services of the Society's legal counsel and its Professional Services Review Organization are available to any member who wishes to utilize them in a fee dispute involving his patient. The Society's legal counsel, Mr. Warren, pointed out that disclosure or non-disclosure of information is a patient's privilege, not the physician's. He further stated that it is a matter of an indemnity not to the physician but to the patient and that the physician has no legal recourse.

QUESTION NO. 13: Does Arkansas Blue Cross-Blue Shield, in any manner, come under the jurisdiction of the Insurance Commission of

the State of Arkansas?

ANSWER: (by Society's legal counsel, APPROVED BY COUNCIL AS PRESENTED). "Arkansas Blue Cross-Blue Shield comes under the general jurisdiction of the Insurance Commissioner of the State of Arkansas. It is covered by a different act than the usual insurance company. I am informed that the Insurance Commissioner does not attempt to exercise control of rates or charges of the Blues nor contractual provisions between the Blues and participating physicians."

QUESTION NO. 14: Would you please cite the references for the ethics related to the concept of Peer Review?

ANSWER: (by Secretary of AMA Judicial Council, APPROVED BY COUNCIL AS PRESENTED). Section 4 of the Principles of Medical Ethics, which states as follows: "The Medical Profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession, and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession."

QUESTION NO. 15: If a particular fee should be disallowed or lowered by Medicare Services and Medipak of Arkansas Blue Cross-Blue Shield, using the same set of allowable figures as developed by themselves acting as Medicare Services, should one begin to think that a restraint of trade phenomenon is in progress?

ANSWER: (ADOPTED BY THE COUNCIL, UPON MOTION OF KOENIG AND SALTZMAN). No. The Society's legal counsel pointed out that "restraint of trade" (Section 2 of the Sherman Act, commonly referred to as the Clayton Act) does not apply to indemnity contracts; the primary contract is not affected by the "usual, customary and reasonable" arrangement—the patient is still liable to the physician.

QUESTION NO. 16: If it should be considered by the Council that the situation in question No. 15 does not represent a restraint of trade phenomenon, would the Council offer an answer describing the phenomenon involved?

ANSWER: (by Society's legal counsel, AS ADOPTED UPON MOTION OF KOENIG AND ORR). It is a contractual phenomenon

with a donee beneficiary indemnity agreement based on a delegation of power.

QUESTION NO. 17: Is it ethical for a physician to bill a patient for duplicate or multiple copies of insurance reports, or should the expense be borne by the insurance companies or by the physician?

ANSWER: (ADOPTED BY THE COUNCIL AS PRESENTED). Section 7, AMA Code of Ethics, Opinion No. 6, of the Judicial Council: "Billing for completing routine health insurance claims forms. The attending physician should complete without charge the appropriate "simplified" Health Insurance Council forms approved by the Council on Medical Service, and similar claims forms as a part of the physician's services to the patient to enable him to receive his benefits. The Judicial Council is of the opinion that a charge for more complex forms may be made in conformity with local custom. This suggestion is advisory. In all cases, the local medical society can be looked to for an authoritative opinion."

QUESTION NO. 18: Since medical fees vary within the Nation and the State, and within localities, and since a particular patient does not have access to the allowable fees as judged by Arkansas Blue Cross-Blue Shield, and, since the physicians of Arkansas do not have access to the secret fee schedule, would the Council direct a statement to us describing its opinion of the propriety of the maintenance of secret fee schedules?

ANSWER: (APPROVED BY THE COUNCIL, UPON MOTION BY KOENIG AND ORR). Although the Council recognizes the merit of not keeping fee schedules secret, the ranges of prevailing fees for Medicare cannot be divulged because of direction of the government. Each individual physician's fee profile is available to him.

QUESTION NO. 19: Would the Council consider polling the membership of the Society, seeking to obtain a copy of each physician's Medicare Services fee profile, so that there could be published a fee schedule showing the disparity of fee recognition within the State?

COUNCIL ACTION: The Council voted (upon motion of Henry and Koenig) to defer action on this question until a study can be made of feasibility, cost, etc., and reported back to the Council.

QUESTION NO. 20: Would the Council

challenge other state societies to develop a fee structure understanding, as outlined in question No. 19, so that the disparity of fee recognition within the Nation could be outlined for the people?

COUNCIL ACTION: The Council voted (upon the motion of Orr and Henry) to defer action on this question pending completion of the study requested in response to question No. 19.

QUESTION NO. 21: Would the Council participate with us in asserting that the Medicare beneficiaries of the Country are receiving unequal protection under the law, because of the disparity of fees recognized by Medicare authorities in the delivery of medical, surgical and hospital services, even though all Medicare beneficiaries the Nation over pay the same amount per month for benefits?

ANSWER: (ADOPTED BY THE COUNCIL, BY MOTION OF ORR AND SALTZMAN). No.

* * *

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, February 6, 1972, at the Coachman's Inn, Little Rock. Present were: Long, Applegate, Watson, Shorey, Shuffield, Saltzman, Raney, Bell, D. Gray, Wynne, Duzan, Harris, Kemp, McCrary, Bethel, Henry, Chudy, Fowler, Thomas, Norton, Whittaker, Ellis, George Mitchell, Charles Silverblatt, J. A. Harrel, Mr. Ed Rensch, Mr. Bob Threlkeld, Mr. Jim Miller, Mr. Gaines Norton, Mr. Rob McCrary, Mr. Don McCrary, Mr. Eugene Warren, Mr. Paul Harris, Mr. Schaefer, Mr. Rainwater, and Miss Richmond.

The Council transacted business as follows:

1. Mr. Bob Threlkeld of International Travel Advisors discussed Society participation in its Orient Adventure, a 14-day tour priced at \$943 per person. Upon motion of Kemp and Saltzman, the Council voted to approve Society participation, with the exact date for the tour to be worked out. The tour will be scheduled sometime during the summer of 1972.

2. Upon the motion of Wynne and Raney, the Council voted to authorize travel expense for Ben Saltzman to attend an AMA Conference on Health Care of the Poor in McAllen, Texas, on February 25-26.

3. Mr. Schaefer reported for the Insurance

Committee on two matters:

A. Status of negotiations with AMA-CNA on the malpractice group plan;

B. Negotiations with Blue Cross-Blue Shield on changing deductible features as a means of reducing premiums. It was reported that changing the deductible from \$100 to \$200 and increasing the Major Medical Corridor from \$100 to \$300 would result in savings of only \$18.60 annually for individual contracts and \$41.28 annually for family contracts. Upon the motion of McCrary and Bell, the Council voted to make no changes in the present provisions of the Blue Cross-Blue Shield group plan for Society members.

4. Mr. Gaines Norton of Winthrop Laboratories discussed the Food and Drug Administration proposal that pHisoHex be placed on a prescription basis. Upon the motion of Kemp and Gray, the Council voted to forward to the FDA and members of the Arkansas Congressional delegation a resolution opposing placing of pHisoHex on a prescription basis and similar actions of FDA without scientific basis.

5. Mr. Jim Miller, representing the Student American Medical Association, discussed with the Council the SAMA program entitled Medical Education and Community Orientation (MECO). The purpose of the program is to assist medical students in obtaining summer jobs in physicians' offices, hospitals, etc. It was pointed out that the medical students participating in the program had not yet had any clinical experience and that the jobs might consist of clerical work. The program has the approval of the Medical School. Upon the motion of Gray, the Council voted to endorse the program.

6. Stanley Applegate spoke regarding the Rural Health Student Loan Fund and the need for funding for implementation. Dean Shorey discussed the lack of funds for the Student Loan Fund and also discussed the proposed establishment of a Department of Family Practice at the Medical Center. Members of the Council were urged to contact their legislators to let them know that the Medical Society supports funding for both.

7. Randolph Ellis reported briefly for his Committee on Medicine and Religion, outlining plans for a statewide meeting October 28th in Little Rock. The Council approved the commit-

tee's plan and voted, upon motion of McCrary and Applegate, to contribute \$100 toward expense of the meeting.

8. The Council considered the report of the Organization Study Committee headed by Dr. Bethel. Upon the motion of Shorey and Shuffield, the Council voted to approve the report with the deletion of recommendation No. 12, which recommended that the House of Delegates discuss limiting offices in the Medical Society to those members in the private practice of medicine and creating a special membership classification for salaried physicians.

9. Mr. Schaefer discussed the Society's Health Manpower Commission and the Health Careers Council being established by the Auxiliary. Upon motion of Shuffield and Shorey, the Council voted to ask the Health Manpower Commission to work with the Health Careers Council.

10. Joseph Norton proposed that the Constitution and By-Laws of the Arkansas Medical Society be changed to allow each councilor district to elect annually for a one-year term a student from any class of the University of Arkansas School of Medicine to serve as a youth delegate to the House of Delegates and to the Council of the Arkansas Medical Society, with full privileges to speak, to serve on committees, and to vote. The Council voted to refer the proposal to the Constitutional Revisions Committee.

11. Charles W. Silverblatt, Coordinator of the Regional Medical Program, discussed the possibility of having a two-day conference on quality care to be co-sponsored by the Society and RMP. Financing would be by RMP. Upon the motion of Shuffield and Saltzman, the Council voted to cooperate with Dr. Silverblatt in the planning of such a seminar.

12. The Council heard a resolution from Greene County Medical Society proposing that all physicians be required to complete two years of family practice before becoming eligible for residency training in one of the specialties. Upon the motion of McCrary and Duzan, the Council voted to receive the resolution for information.

13. H. W. Thomas, chairman of the Budget Committee, presented the proposed budget for 1972. Dr. Thomas called the attention of the Council to the fact that there were several recommendations in the budget committee report which he was requesting approval for, in addition to approving the expenditures. The Council

voted to accept the budget as presented, with the addition of the \$100 voted earlier for the Medicine and Religion Committee and \$500 for the Health Careers Council. Upon the motion of McCrary and Bethel, the Council voted to appoint a committee to determine whether or not the \$1500 budgeted for the Senior Medical Day should be used to pay for a dinner for the senior students.

14. The Council voted to pay one-half of the expenses for five representatives to attend the AMA-AMPAC Public Affairs Workshop in Washington, D. C. in March. Motion for approval was by Shuffield and Kemp.

15. Chairman Long advised the Council that the headquarters office had done some investigation on the feasibility of publishing a pictorial membership directory. Because of anticipated problems in obtaining photographs of the members, as well as the cost of preparation and publishing such a directory, the Council voted (by motion of Saltzman and Kemp) to recommend disapproval of the proposal.

16. Ben Saltzman, chairman of the Rural Health Committee, advised the Council that the Agricultural Extension Service was reorganizing its 4-H contests and awards system and requesting continuation of Society support. Dr. Saltzman asked that, whenever possible, councilors from the district attend the regional congresses of the 4-H clubs to present plaques to winners on behalf of the Society.

The Council went into *Executive Session* for the following items of business:

17. Morris Henry called the Council's attention to the organization of a committee to promote the passage of a Kennedy-type National Health Insurance plan. It was decided to ask the councilors to advise their county societies of the existence of the committee and ask them to oppose their activities.

18. Mr. Schaefer advised the Council that he had taken initial steps to obtain a grant from the National Center for Health Sciences Research and Development to conduct an Experimental Medical Care Review Organization. He reviewed the philosophical positions opposing the acceptance of government money for such projects and presented various reasons for considering accepting such grants; among those were the possibility of expanded activities for the Society, the fact that the Council had just approved a budget

with a deficit of \$7,549.00, and that Society employees' overall wage increase was to be only 3.69% in an era of uncontrolled inflation and 15% wage increases. The probability that the government would find another organization to undertake experimental medical care review was considered. After considerable discussion of the dangers of accepting Federal funds, the Council voted not to apply for a grant.

The meeting adjourned at 3:50 P.M.

APPROVED: C. C. Long, M.D.

Chairman of the Council

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**SUPPLEMENT TO COUNCIL MINUTES
REPORT BY THE COMMITTEE
TO REVIEW THE ORGANIZATION OF
THE ARKANSAS MEDICAL SOCIETY**

Dr. James Bethel, Chairman

The committee met on Sunday, August 8, 1971, and discussed various ideas which might improve the effectiveness of the Arkansas Medical Society. The committee communicated on several occasions by telephone and letter.

Ten suggestions for changes, drawn up by a special committee of the Union County Medical Society headed by Dr. J. P. Ellis, were received from the Union County Medical Society.

The committee met again on January 9th and reviewed all of the material received from various sources. Each suggestion was compared with the present Medical Society Constitution to see if the apparent purpose of the suggestion was already accomplished by the Constitution. Each suggestion was examined for its feasibility; the theory apparent behind each suggestion was weighed against the realities of medical practice and human nature to decide whether or not the present Constitution, or the new suggestion, would result in a greater degree of real democracy within the organization. Those ideas which were found not to be provided for in the present Constitution were given very careful consideration. Although few suggestions were accepted without modification, several changes are recommended herein which the committee feels should greatly improve the operation of the Medical Society.

It was observed that the greatest faults in the operation of the Society are not in the manner of organization but are in the lack of implementation of the provisions of the present Constitution. It became obvious to the committee that the Society suffers more from the inattention of

its members than from faulty organization.

Ideas and suggestions discussed at the meetings described above were as follows:

1. Suggestion: "Establish twenty councilor districts—each district to elect its own councilor."

Discussion: At present, the Society is divided into ten councilor districts, each represented by two councilors elected on alternate years.

(A) Each councilor is nominated by members from his councilor district in attendance at the annual meeting of the Arkansas Medical Society. The Constitution of the Society requires that to be elected to an office, the member must be in attendance at the annual meeting at which he is elected. The nomination by officers who are present at the meeting insures that only members who are interested in the Society and are, therefore, probably better informed on the affairs of the Society will do the electing of officers who are also informed and interested. The Constitution of the Arkansas Medical Society was amended thirteen years ago to increase the number of councilors from ten to twenty. This was done because of the dissatisfaction of some councilor districts over the fact that in districts dominated by a metropolitan county, the rural areas either had no representation on the Council or the councilor had to be alternated between the metropolitan county and the rural counties even though possibly ninety percent of the councilor district physicians were in the city. By allowing two councilors in each district, the districts have worked out a "gentlemen's agreement" so that one councilor serves from the rural area and one from the city area. The committee felt that redistricting the State to establish twenty councilor districts would be an almost insurmountable task and would serve more to disrupt the Society than to unite it.

Recommendation: The committee recommends no change in the present councilor districts or in the manner of election of the councilors by the House of Delegates.

1. (B) Suggestion: "Amend the Constitution to establish positions of senior and junior councilor for each district, discontinuing the practice of having two councilors from each district. It was the feeling of the group that a more effective chain of responsibility could be identified by

having a senior and junior councilor who would be elected on alternate years.

Committee recommendation: Believing that a divided responsibility frequently is a neglected responsibility, the committee suggests that the organization of the Council would be improved and the chain of responsibility made stronger if the councilor having the longest service on the Council were designated as senior councilor and the man from that district with the least amount of service on the Council be designated as the junior councilor. The senior councilor should be given primary responsibility for seeing that the duties of the councilors in the district were carried out and that the wishes of the county societies within his councilor district were transmitted to the Council for consideration. Both junior and senior councilor should have votes on the Council, as at present, and in every other way be equal and eligible for the position of chairman of the Council. The senior and junior councilor should be elected on alternate years. The practice of having two councilors from each district should be retained as at present.

2. Suggestion: "The section (in the Constitution) on the duties of the councilors states that councilors should be "prepared" to submit a report on county society activities. It is suggested that the Constitution be amended to require councilors to submit a written report of their activities to the Council each year for publication in the Journal."

Committee recommendation: The committee agrees that requiring the councilors to make a written report of their activities within the councilor district would encourage the councilors to remain in closer touch with their county district societies. The committee recommends this constitutional revision.

3. Suggestion: "In order to encourage the organization of and continuing activity by councilor district societies, have the Council of the Arkansas Medical Society establish a specific period during which councilor district society meetings would be required and require that the councilors report on the meetings."

Discussion: This suggestion is apparently aimed at insuring that the councilors of each district will, in fact, be the "organizers and peacemakers" for their councilor districts as required by the Constitution under the section on duties of the councilors. It is believed that vital,

active councilor district societies would make medical organization more effective, contribute to a wider interchange of scientific knowledge, and unite the medical profession into a more cohesive unit. The committee believes that setting a definite period during which councilor district society meetings would be held will make postponement of the meetings and their ultimate overlooking less likely.

Recommendation: That this recommendation be implemented by constitutional amendment.

4. Suggestion: "Abolish the practice of "at large" election of councilors."

Discussion: The committee assumed that use of the term "at large" means the election of the councilors by the House of Delegates rather than election of the councilors by the councilor districts before the annual session. The present system provides a democratic method for election of the councilors who are interested enough to attend the annual meeting and, by their attendance, give an indication that they are informed on the problems facing medicine. The county society delegates from each councilor district who attend the annual session meet immediately after the first session of the House of Delegates to select a member to the Nominating Committee. The member selected for the Nominating Committee represents his councilor district on the Nominating Committee when it meets to select the councilor from that district, as well as the other officers of the Medical Society. Only those members who are present at the annual session are eligible for nomination and election to office. Since the Council is the governing body of the Society between annual sessions, it is believed that although the councilor districts have a primary interest in nominating their councilors, the whole Society retains a vital interest in the election of each councilor who will participate in the governing of the Society during fifty-one weeks of the year. While the present system may not be perfect, it can best be improved by encouraging each county medical society within the councilor district to insure that all of their delegates are present at the annual session to participate in the selection of the nominee for councilor district and his subsequent election by the House.

Committee recommendation: It is recommended that the present system of electing councilors be retained.

5. Suggestion: "Let the president of the Society be the president of the Council."

Discussion: The committee was not aware of the purpose of this suggestion. However, it is the opinion of the committee that a democratic organization is better served by having the House of Delegates, with its president, retain its identity and allowing the Council to select its own presiding officer from among those of its number whom they know to be experienced, informed, and willing to give all the time and attention required by this important position. The committee observed that very frequently the Society's president is named from among those members who have not previously had a State Society office. Having a new chairman of the Council with each new president would destroy the present desirable continuity in this office and in the affairs of the Council.

Recommendation: It is recommended that the present method of selecting the chairman of the Council be continued.

6. Suggestion: "Specify that a summary of all actions and recommendations of the Council for the first ten months of the official year of the Society will be presented in writing to each county society no later than forty-five days preceding the first day of the annual meeting of the House of Delegates."

Discussion: The committee feels that it is of utmost importance that the county societies be informed well in advance of the annual meeting on what subjects are to be discussed during the meeting. County societies should instruct their delegates on what actions to take on the problems to be considered and should insure that their delegates do actually attend the annual session. The suggestion itself demonstrates that even members who have been concerned with the operation of the Society are not knowledgeable in how the organization carries on its business.

The Journal of the Arkansas Medical Society is the official organ of the Society and, as such, is a permanent record of its activities. Each member of the Society receives the Journal each month. The March issue in each year contains all of the business that is known to be pending for the State meeting in April. All of the actions and the recommendations of the Council through February 15th (the first ten months of the official year) are included in the March issue of the Journal. Approximately four weeks before the

date of the annual session, the headquarters office sends a reminder to every delegate that all resolutions to be considered by the State meeting must be in the headquarters office at least twenty days prior to the date of the meeting. Included in the mailing are:

1. A letter of instruction from the speaker of the House to each delegate, outlining the duties and responsibilities of the delegate with instructions on how to prepare for the discharge of his duties.

2. A copy of a letter to county society secretaries with instructions regarding the issuance and use of delegate credentials.

3. Agenda for both meetings of the House of Delegates with the following attachments:

- (A) All reports and resolutions received too late for publication in the March Journal.

- (B) Reports of Council actions taken after publication of the March Journal and prior to the date of mailing.

- (C) A list of all board positions and offices to be filled. The list includes the name of the position, the term of office, by whom to be appointed and whether the incumbent is eligible for reappointment.

4. A listing showing which reference committees will consider each item of business by name of report or resolution.

It is believed that this system of informing the county delegates goes beyond the requirements of the above suggestion in every respect.

Recommendation: Since present practices present all available information to the delegates prior to coming to the State meeting, no amendment is necessary.

7. Suggestion: "Specify that in the first session of the House of Delegates during the annual meeting, the Council will present in writing to each delegate a summary of its actions and recommendations during the two months preceding the annual meeting to include the day of the meeting of the House of Delegates."

Discussion: The measures taken to inform the House of Delegates of the actions of the Council during the two months preceding the annual session are described in the preceding discussion. Since the Sunday meeting of the Council during the annual session is usually adjourned just in time for members to attend the House of Delegates meeting, there is no time to

draw up minutes for presentation at the first House of Delegates meeting. Attention is called to the fact that a report of Council action during the annual session is read at the last meeting of the House of Delegates on Wednesday.

Recommendation: It is believed that the present method of reporting Council actions is adequate and as up-to-date as practicable.

8. There were two different suggestions on the duties of the vice presidents and the number of presidents to be elected:

(A) "Establish six vice presidents in the Society. Each vice president will be the chairman of a reference committee related to the scope of his duties as a vice president. Each vice president will be elected for three years and will serve a three-year term on the Council (the term will be staggered)." There followed a list of six vice presidents with one to be in charge of public liaison, governmental affairs and third-party relationship; four assigned to specialties and one vice president for education.

(B) Another suggestion for the duties of the vice president was as follows: "Make each vice president of the Society responsible for a number of the committees of the Society and possibly for county societies and different areas of the State. The vice presidents would be expected to stimulate and guide the activities of the committees and of the county societies assigned to them. They would be expected to write a written report on each committee and county society within their jurisdiction."

Discussion: The committee agrees that the duties of the vice presidents should be enlarged and the status of this office enhanced. However, it was felt that the activities of the county societies should be the sole responsibility of the councilor for that district and that sharing this responsibility with one of the vice presidents would result in the neglect of this phase of medical organization. The suggestion that vice presidents be assigned for public liaison, governmental affairs, education, family practice and other fields in a great part parallels the committee structure now in effect. The vice presidents would largely replace committee chairmen in these areas of responsibility.

Committee recommendation: The committee recommends that the Society assign each of its

three vice presidents a number of the committees of the Society; request the vice presidents to stimulate and guide and maintain liaison with the committees assigned to him. He would be expected to write a written report of his activities and of the committees within his jurisdiction. Instead of electing the vice presidents for a three-year term as suggested, the committee feels the Society would be better served to make each vice president eligible for re-election; thus, insuring that an active, interested vice president could be retained in office as long as his performance indicated.

9. Suggestion: "That a doctor be selected in each councilor district to be recognized for his accomplishments with a certificate of accomplishment. Emphasis should be placed on younger physicians for this recognition."

Discussion: The committee felt that recognition of a physician in each councilor district is a commendable aim but that it could be accomplished either on a councilor district basis or on a statewide basis without a constitutional revision.

Recommendation: It is not necessary to amend the Constitution to accomplish the aims of this suggestion.

10. Suggestion: "Specify that each reference committee will publish its known agenda sixty days before the annual meeting; that it will meet in open session thirty days before the annual meeting and again during the annual meeting."

Discussion: The holding of open hearings of the reference committees is a recent innovation in the Arkansas Medical Society. The committee feels that the holding of open hearings during the annual session contributes greatly to the understanding of the membership and to the deliberations of the House of Delegates. The principal thrust of this suggestion seems to be to insure that the matters to be heard by the reference committee will be well known and publicized to the membership. It is believed that the aim of extended discussion of the problems confronting each reference committee is commendable. The length of the discussions is limited, however, by the limitation of the time of physicians and their willingness to travel to meetings and give their attention to the matters over repeated or extended periods.

The committee believes that the present operation of the annual meeting, as it pertains to

the reference committees, is not well understood. All matters known to be presented at the House of Delegates, including committee reports and the report of the meetings of the Council, are published in the March issue of the Journal of the Arkansas Medical Society, which goes to all members of the Medical Society. The March Journal goes to press on February 15th, approximately sixty days before the annual session. The name of the chairman and the members of each reference committee are published in the same issue, along with an announcement of the time and place of their initial meeting at the annual session. The printed program at the annual session lists the subject (committee reports, resolutions, reports of the Council, and so forth) to be considered by each reference committee; thus, each interested member can review in the March Journal all of the business known to be considered at the annual session. He can ascertain the time and place of the meeting and is informed as to the committee membership in each case. When he arrives at the annual meeting, the printed program will list for the member the committee which will discuss each item of business.

Committee recommendation: Committee feels that the reference committee hearings have enhanced the interest of the members in the operation of their Society as well as their understanding. It is believed that the present method of informing the membership is adequate and meets the requirements of this suggestion very well, with the exception that no meeting prior to the annual session is now held. It is believed that such a meeting would entail unnecessary expense, travel, and time and would be very poorly attended if held. It is recommended that the present system of reference committee hearings and information regarding them be followed. County medical societies and individual members are encouraged to refer to the March issue of the Journal of the Arkansas Medical Society for complete information on the subjects to be considered at the annual State meeting.

11. Suggestion: "Require the representatives of the various boards, such as Comprehensive Health Planning and Regional Medical Program, to report on the activities of the Board to the Council and/or the Journal."

Discussion: The committee felt that obtaining reports from its representatives is a logical

requirement which should be observed by the Council. Obtaining reports from its representatives is an administrative matter, however, and should not be included in the Society's Constitution.

Recommendation: Recommend that this suggestion be called to the attention of the Council but that no action be taken to make it a part of the Constitution.

12. Suggestion: "Some action be taken in modifying the Constitution to insure the continued control of the Arkansas Medical Society by physicians in private practice."

Discussion: It is understood that over half of the positions on committees, councils, commissions and offices of the American Medical Association are held by physicians who are not in the private practice of medicine. It is believed that salaried physicians do not share a common point of view with physicians in private practice. The fact that salaried physicians are in so many positions of influence in the American Medical Association may account for that organization's reported difficulties. It was suggested to the committee that with more and more physicians leaving private practice to accept salaried positions, it might be well to consider such a provision of the Constitution at this time. The committee recognizes that this will be a difficult policy to explain to those members who are salaried physicians. In order to accomplish such a provision, a new membership category would have to be authorized in the Constitution.

Recommendation: That the Council and House of Delegates discuss the status of salaried physicians as members of the Arkansas Medical Society to decide if a special membership classification should be established for them.

13. Suggestion: "Establish split sessions for the annual convention. The annual meeting of the House of Delegates wherein election of officers would occur and wherein the full authority of the House would be expressed; would not be related to scientific presentation. The scientific session at another time would not be devoted to business unless an emergency should be declared by the president of the Society."

Discussion: For a democratic organization to function according to the will of its members, the meetings of the elected representatives of that organization must be reasonably well attended. One of the principal problems of all

medical societies is in obtaining attendance at meetings. It is believed that by having the business meetings and scientific sessions in conjunction with the social affairs of the Society, the attendance at all three types of functions is enhanced. The committee wishes to point out that while the House of Delegates is in session, no scientific meetings or social affairs are held. While the scientific meetings are in session, no social events or business meetings are being held. The House of Delegates meetings are held on Sunday afternoon, preceded by a meeting of the Council and followed by meetings of the reference committees. Scientific meetings are held all day Monday and all day Tuesday. The House of Delegates meets again on Wednesday morning. It is believed that separating the two meetings so that the delegates would have to make two trips to the meeting place would inflict an unnecessary hardship on the delegates and adversely affect attendance. The tax deductible aspect of attendance at the business meetings would be jeopardized if they were not in connection with the scientific meetings of the Society. The present arrangement of meetings of the House of Delegates allows for time for discussion among the delegates on the matters which have been presented at the first meeting and before they are finally voted on at the Wednesday morning meeting.

Recommendation: Since the meeting, as now conducted, is essentially divided into business sessions and scientific meetings, the committee believes that the purpose of the suggestion is accomplished without necessitating travel to two separate meetings. It is recommended that meetings be continued as at present.

II. Suggestion: "That a firm of consultants be retained to study the reorganization of the Arkansas Medical Society and its Constitution."

Discussion: The present Constitution provides a tested and proved method of amendment. The organization is designed very democratically and in such a way that it must be responsive to the membership through its representative form of government. The committee believes that shortcomings of the Arkansas Medical Society, if they do exist, are attributable not to the Constitution or to the organization but to the implementation of the Constitution by us, the members of the Arkansas Medical Society. This committee, having thoroughly studied the Constitution of the Arkansas Medical Society and other state medical societies, believes that retaining a firm of consultants to duplicate their work would be a needless expense of doubtful value.

Recommendation: That retaining a firm of consultants not be considered.



PERSONAL AND NEWS ITEMS

Dr. Applegate Guest Speaker

Dr. Stanley Applegate of Springdale spoke to the Registered Nurses of District 14 (Washington, Madison and Benton Counties) in January. His subject was the state-wide Physician's Assistants Conference which was held in Hot Springs in October.

Dr. Massey Elected

Dr. L. D. Massey was elected chief of staff of the Osceola Memorial Hospital in Osceola, at the January staff meeting. Dr. Massey is a Fellow in the American College of Physicians.

Physician Attends Seminar

Dr. J. L. Martindale of Benton, chairman of

the drug abuse study for the Ouachita Area Council, Boy Scouts of America, attended an all-day seminar on the subject of drug abuse which was held in Memphis, Tennessee, in January. The Boy Scout approach to the drug problem is planned as a youth program run by young people. The aim of the program is to establish communication between youths in Scouting and their parents, and to bring as many others into the program as possible.

Executive Committee of Hospital Named

Serving as the executive committee of the medical staff at St. Edward Mercy Hospital in Fort Smith for the coming year are Drs. A. S. Koenig,

pathology; W. C. Holmes, Jr., surgery; Archie Hewett, urology and chief of staff-elect; Kenneth Lilly, member-at-large; Joel Parker, pediatrics; John Parta, general practice; Charles Floyd, chief of staff; Jerry Stewart, internal medicine; Paul L. Rogers, radiology; Joe Mason, obstetrics and gynecology; Charles Lane, eye, ear, nose and throat; James Buie, orthopedics; and Edward Safranek, anesthesiology.

Physicians Speak

Dr. Jim Citty and Dr. Charles N. Jones, both of DeQueen, were speakers for a program, a "Five Day Plan" to stop smoking, which was sponsored by the American Cancer Society. Dr. Citty spoke on "Heart Disease and Emphysema" and Dr. Jones discussed "Cancer".

New Clinic in Conway

Dr. Charles A. Archer opened a new clinic, located at 1419 Caldwell Street in Conway, on February 1st. He was previously associated with the Conway Clinic in Conway.

Physician and Clinic Announce New Associates

The Millard-Henry Clinic at Russellville announces the addition of *Dr. G. Howard Kimball* to the clinic staff as a general surgeon.

Dr. James T. Blackmon of Arkadelphia announces the association of *Dr. Curtis E. Stover* for family practice and obstetrics.

Physician on Leave of Absence

Dr. Walter Ducote Haynes is taking an additional year in radiotherapy training at the M. D. Anderson Hospital in Houston. On leave of absence from Radiology Associates in Little Rock, Dr. Haynes will return in December to practice full time radiotherapy with Radiology Associates.

Waldron Gets New Doctor

Dr. Gene L. Rogers has established his office for the general practice of medicine at 408 North Washington Street in Waldron.

Hospitals Announce Medical Staffs for 1972

Dr. Robert Hill has been elected chief of staff of Ouachita Memorial Hospital in Hot Springs. Dr. Jack King was elected vice chief of staff and Dr. Patrick Knight was elected secretary.

Officers of the Dermott-Chicot Memorial Hospital medical staff for 1972 are Dr. Thomas C. Wilson, chief of staff; Dr. H. W. Thomas, vice chief of staff; and Dr. Major E. Smith, secretary.

New Hospital to Be Built

Plans were announced recently for a new 300-bed full-service general hospital to be built in Little Rock by the Little Rock Land Company. The Doctors Building, owned by the Land Company, will have an eight story addition built on the south end. The new hospital will be joined with the Doctors Building and will be linked at every floor. Dr. John V. Satterfield, president of the Land Company, stated that the hospital will be developed entirely with private funds and will be operated for profit, and that it will be a tax paying institution.

Physicians Appointed

Governor Dale Bumpers recently announced the appointment of Society members to positions on the following State Boards.

Arkansas State Board of Health: Dr. Ben N. Saltzman of Mountain Home, appointed to a four year term. Dr. C. Lewis Hyatt of Monticello and Dr. William S. Orr, Jr. of Little Rock, each reappointed to a four year term.

Arkansas State Medical Board: Dr. John F. Guenther of Mountain Home, reappointed to an eight year term. Dr. H. Elvin Shuffield of Little Rock, appointed to fill the vacancy created when Dr. William Snodgrass resigned. Dr. Shuffield's term expires December 31, 1978.



PROCEEDINGS OF SOCIETIES

Columbia County Medical Society

Officers for the Columbia County Medical Society for 1972 have been elected. They are Dr. Charles Kelley, president; Dr. Charles H. Weber, vice-president; Dr. Robert Hunter, secretary-treasurer; Dr. Paul Sizemore, delegate; and Dr. John E. Alexander, alternate delegate.

Fifth Councilor District Medical Society

Dr. Wayne G. Elliott of El Dorado was elected president of the Fifth Councilor District Medical

Society at its annual meeting in January. Other officers elected were Dr. Jack Dobson of Fordyce, vice-president; and Dr. John Alexander of Magnolia, secretary.

Union County Medical Society

The Union County Medical Society and the Arkansas State Department of Health in conjunction with the National Highway Safety Bu-

reau are sponsoring a twenty-four week training course on "Emergency Care and Transportation of the Sick and Injured".

The course, which began January 24th, is designed to upgrade ambulance personnel to the status of Emergency Medical Technician-Ambulance. After passing a rigid examination, they will be registered on the Emergency Medical Technician National Register.



NEW MEMBERS

Dr. Charles Ernest Hicks

Dr. Charles E. Hicks is a new member of the Drew County Medical Society. He is a native of Monticello, Arkansas.

Dr. Hicks received a B.A. degree from Hendrix College in Conway in 1956, and his M.D. degree from the University of Arkansas School of Medicine in 1960. His internship was completed at the Baptist Medical Center in Little Rock.

Dr. Hicks previously was in practice at the Crossett Health Center in Crossett, Arkansas, and the Drumright Memorial Hospital in Drumright, Oklahoma. He is a member of the American Society of Abdominal Surgeons.

Dr. Hicks' office for the general practice of medicine is at 216 South Main Street in Monticello.

Dr. Boyce W. West

Dr. Boyce W. West is a new member of the Johnson County Medical Society. He was born in Christine, Texas.

Dr. West was graduated from the University of Arkansas in 1966, and from the University of Arkansas School of Medicine in 1970. He completed his internship at St. Vincent Infirmary in Little Rock.

Since July 1971 Dr. West has been associated with Dr. Guy Shrigley at 416 Sevier Street in Clarksville.

Dr. Jack Thomas Patterson

Dr. Jack T. Patterson is a new member of the Johnson County Medical Society.

A native of Clarksville, he attended the College of the Ozarks and the University of Arkansas, graduating in 1965 and 1968, respectively. In 1971, he was graduated from the University of Arkansas School of Medicine.

Dr. Patterson is presently receiving his internship training at John Peter Smith Hospital in Fort Worth, Texas.

Dr. Arlis W. Loe

Dr. Arlis W. Loe is a new member of the White County Medical Society. He is a native of Prescott, Arkansas.

Dr. Loe received his pre-medical education at Henderson State College in Arkadelphia, from which he was graduated in 1963. In 1967, he was graduated from the University of Arkansas School of Medicine. Dr. Loe's internship was completed at St. Vincent Infirmary in Little Rock. He received one year of general surgery training at the University of Arkansas Medical Center.

Dr. Loe is associated with the Searcy Clinic, 910 East Race Avenue, Searcy, for general and family practice.

Dr. James A. Simpson

Dr. James A. Simpson, a native of Little Rock, is a new member of the White County Medical Society.

He attended the University of Arkansas and the University of Arkansas School of Medicine, graduating from the latter in 1964. He completed his internship at Minneapolis General Hospital,

Minneapolis, Minnesota. He returned to the University of Arkansas Medical Center for a residency in General Surgery.

Dr. Simpson served in the United States Air Force for two years, serving as chief of surgery at Forbes Air Force Base, Topeka, Kansas.

Dr. Simpson is associated with Dr. Porter Rodgers, Jr., in the practice of General Surgery at 403 East Lincoln, Searcy. He is certified by the American Board of Surgery.

Dr. Clifford C. Councille, Jr.

Dr. Clifford C. Councille, Jr. is a new member of the Pulaski County Medical Society. He was

born in Blytheville, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1970. Dr. Councille is a resident in obstetrics and gynecology at the University of Arkansas Medical Center.

Dr. Luis F. Ardon

Dr. Luis F. Ardon is a new member of the Pulaski County Medical Society. He is a native of Costa Rica. He received his medical education at the University of Bologna, Bologna, Italy, graduating in 1965.

Dr. Ardon is a Fellow in medicine (Nephrology) at the University of Arkansas Medical Center.



O B I T U A R Y

Dr. Reavis William Pickett

Dr. Reavis William Pickett of Texarkana died August 14, 1971, at the age of sixty-three.

Dr. Pickett was graduated from Baylor University College of Medicine in Houston, Texas, in 1931. He had practiced in Texarkana for over twenty-five years. He was a member of the Miller County Medical Society, the Arkansas Medical Society, the American Medical Association, the Southwestern Surgical Congress, and the American College of Surgeons.



Postoperative Psychosis in Cardiectomy Patients

O. L. Layne, Jr., and S. C. Yudofsky (H. Bruch, 1200 Moursund, Houston 77025)

New Eng J Med 284:518-520 (March 11) 1971

Fifty-eight cardiectomy patients and 20 patients undergoing major vascular surgery were studied to assess the roles of organic factors, sleep and sensory deprivation, and psychiatric factors in the development of postoperative psychosis. Two thirds of the cardiac patients were psychologically evaluated preoperatively, extensively interviewed and encouraged to discuss the emo-

THINGS



TO

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Conference on Extra-Corporeal Technology

The Tenth International Conference on Extra-Corporeal Technology will be held July 27, 28, and 29, 1972, at the Waldorf-Astoria in New York City. Inquiries should be directed to: Edward C. Berger, Executive Director, American Society of Extra-Corporeal Technology, Inc., 287 East Sixth Street, St. Paul, Minnesota 55101.

Emergency Health Services Conference

The Fourth Annual Emergency Health Services Conference will be held in Little Rock on September 15 and 16, 1972. The Conference will serve as the annual section meeting of Section VI of the American College of Surgeons.

tional aspects of their surgery. The findings include a 14% overall incidence of postoperative psychosis in cardiectomy patients, with increased incidences in males, older patients, patients undergoing aortic valve replacement, patients with neurological and other organic abnormalities, and patients expressing minimal preoperative anxiety. The preoperative psychiatric interview was found to be associated with a 50% reduction in postoperative psychosis.

Digest of Events

REGISTRATION

The registration desk will be located on the Mezzanine of the Arlington Hotel and will be open as follows:

Sunday, April 23	8:00 A.M. to 5:00 P.M.
Monday, April 24	8:00 A.M. to 5:00 P.M.
Tuesday, April 25	8:00 A.M. to 5:00 P.M.
Wednesday, April 26	8:00 A.M. to 12:00 Noon

Registration cards and badges will be prepared in advance for the officers of the Arkansas Medical Society and for the county society delegates. Delegates are requested to present credentials in proper form when registering.

All members and visitors are required to register, as admission to all sessions will be by badge only. Bring your 1972 membership card to facilitate registration.

There will be a \$5.00 registration fee for non-member physicians.

Tickets for the Tuesday night cocktail party and banquet may be purchased at the registration desk.

TELEPHONE SERVICE

A special convention telephone will be installed at the Society's registration desk. The telephone number will be 623-5934. Give this number to your office personnel so that they may contact you in case of an emergency.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society will meet as follows:

Sunday, April 23	10:00 A.M.
Monday, April 24	7:30 A.M.
Tuesday, April 25	7:30 A.M.
Wednesday, April 26	9:00 A.M.
Wednesday, April 26	Immediately following the adjournment of the House of Delegates (Brief re-organizational meeting and group photograph of new officers)

The voting members of the Council are: the councilors, the president, the first vice president, president-elect, secretary and treasurer. The speaker, vice speaker, and past presidents are members ex-officio without vote.

HOUSE OF DELEGATES

The opening session of the House of Delegates of the Arkansas Medical Society will be called to order at 1:00 P.M. on Sunday, April 23, in Room "C" of the Conference Center, Arlington Hotel.

The closing session and election of officers will begin at 10:00 A.M. on Wednesday, April 26, in the same room.

All items of business will be referred by the Speaker of the House of Delegates to three reference committees. Open hearings on all resolutions and reports will begin at 3:30 P.M. on Sunday, April 23. Any member of the Arkansas Medical Society is welcome to attend the meetings of the reference committees and to

express his views on the various reports, resolutions, etc. After the open hearings the reference committees will go into executive session for the purpose of preparing reports and recommendations to the House of Delegates.

All items of business to be considered by the House must either be printed in the March issue of the Journal or submitted to the headquarters office in writing twenty days prior to the meeting. Any new business proposed during sessions of the House must have two-thirds vote of attending delegates for introduction.

SCIENTIFIC SESSIONS

The scientific program of the annual meeting will be provided by the faculty of the University of Arkansas School of Medicine and by out-of-State guest speakers of several specialty groups. The scientific program will be presented on Monday and until noon on Tuesday.

Section and specialty group meetings will be held on Tuesday afternoon. The Association of Tumor Clinic Staff Members in Arkansas will hold a luncheon meeting on Monday.

The complete program for the annual meeting begins on page 336.

TECHNICAL AND SCIENTIFIC EXHIBITS

Thirty-eight displays by firms whose products and services are of interest to Arkansas physicians will be housed in the Conference Center of the Hotel on the Mezzanine floor level.

In addition, there will be scientific and industrial exhibits in the adjacent area of the Conference Center. A complete list of the scientific and technical exhibits appears on pages 345 to 348. Exhibit hours are from 8:00 A.M. to 5:00 P.M. on Monday and Tuesday.

FREE COFFEE

The Arkansas State Medical Assistants Society will serve coffee in the exhibit area of the Conference Center. Members are urged to visit the medical assistants for a cup of coffee and discussion of the medical assistants' organization.

SUNDAY EVENING RECEPTION

The Council will host a reception for all members, wives, and guests of the Arkansas Medical Society at 6:30 P.M. on Sunday, April 23rd, in the Arlington Hotel. All members are encouraged to attend and become better acquainted with the officers of the Society.

SENIOR MEDICAL STUDENT DAY AT THE ANNUAL SESSION

Senior medical students will be invited to attend the Scientific Session on Monday, April 24th.

A 12:00 luncheon, to be hosted by the Arkansas Medical Society, is planned for the students that day.

FIFTY YEAR CLUB BREAKFAST

The Society will host a breakfast for members of the Fifty Year Club at 7:30 A.M. on Tuesday, April 25th, in the Arlington Hotel. Members of the Fifty Year Club may make reservations for the breakfast at the Society's convention registration desk.

PAST PRESIDENTS' BREAKFAST

The traditional breakfast for former presidents of the Arkansas Medical Society will be held at 7:30 A.M. on Wednesday, April 26th, in the Arlington Hotel.

MEMORIAL SERVICE

A joint Society-Auxiliary Memorial Service will be held on Tuesday, April 25th, at 11:30 A.M., in the Ballroom of the Arlington Hotel.

MONDAY EVENING PARTY

Arkansas Blue Cross-Blue Shield will host a cocktail party on Monday evening for all members of the Arkansas Medical Society and special guests. The party will be held at the Vapors Supper Club, beginning at 6:30 P.M.

Following the cocktail party, dinner will be served at the Vapors at 7:30 P.M. The program committee has arranged for professional entertainment for the enjoyment of the members following dinner. Tickets may be purchased at the registration desk.

TUESDAY EVENING COCKTAIL PARTY

A cocktail party will precede the Inaugural Banquet on Tuesday evening, beginning at 6:00 P.M. The party will be held at pool side if weather permits. Tickets will be on sale at the convention registration desk.

PRESIDENT'S INAUGURAL BANQUET

The social highlight of the 1972 annual session will be the President's Inaugural Banquet on Tuesday evening, April 25th, in the Crystal Ballroom of the Arlington Hotel, beginning at 7:00 P.M.

The Society President, Dr. Stanley Applegate, will act as master of ceremonies.

Dr. Robert Watson will be installed as president for 1972-73.

Through the courtesy of Mountain Valley Water Company, the incomparable Hildegard will provide the entertainment for the banquet.

The Arlington Hotel orchestra will play for dancing in the Hotel Ballroom following the banquet.

Tickets for the banquet will be available at the Society's convention registration desk.



Distinguished Guest Speakers



MARVIN L. MURPHY, M.D.
Associate Professor of Medicine
University of Arkansas School of Medicine
Little Rock, Arkansas



DAVID L. BARCLAY, M.D.
Professor and Head,
Department of Obstetrics and Gynecology,
University of Arkansas School of Medicine
Little Rock, Arkansas



WINSTON K. SHOREY, M.D.
Dean of the University of Arkansas
School of Medicine
Little Rock, Arkansas



JAMES L. DENNIS, M.D.
Vice President for Health Sciences
University of Arkansas Medical Center
Little Rock, Arkansas



JOSEPH H. BATES, M.D.
Professor of Medicine,
University of Arkansas School of Medicine
Little Rock, Arkansas

Distinguished Guest Speakers

(PHOTOS NOT AVAILABLE)

ROBERT S. ABERNATHY, M.D.
Professor and Chairman,
Department of Medicine
University of Arkansas School of Medicine
Little Rock, Arkansas

GILBERT S. CAMPBELL, M.D.
Professor and Chairman,
Department of Surgery
University of Arkansas School of Medicine
Little Rock, Arkansas

JOE E. HOLOUBEK, M.D.
Shreveport, Louisiana

ALICE BAKER HOLOUBEK, M.D.
Shreveport, Louisiana

DONALD B. KETTELKAMP, M.D.
Professor and Chairman, Division of
Orthopedic Surgery
University of Arkansas School of Medicine
Little Rock, Arkansas

WILLIAM A. SODEMAN, JR., M.D.
Associate Professor of Medicine
University of Arkansas School of Medicine
Little Rock, Arkansas

JAMES E. DOHERTY, M.D.
Professor of Medicine
University of Arkansas School of Medicine
Little Rock, Arkansas

ALSTON JENNINGS
Practicing Attorney
Little Rock, Arkansas

BRANCH T. FIELDS
Practicing Attorney
Little Rock, Arkansas

HARRY HAYES, JR., M.D.
Little Rock, Arkansas
Chairman, Committee on Insurance
Arkansas Medical Society

FRANCIS M. HENDERSON, M.D.
Little Rock, Arkansas
Director, Arkansas Health Systems
Foundation

WILLIAM J. FLANIGAN, M.D.
Little Rock, Arkansas
Director, Comprehensive Kidney Program
for Arkansas

FRANCIS E. LeJEUNE, JR., M.D.
Chairman, Department of Otolaryngology
Ochsner Foundation Hospital
New Orleans, Louisiana

JEAN A. CORTNER, M.D.
Professor and Chairman,
Department of Pediatrics
State University of New York at Buffalo,
School of Medicine
Buffalo, New York



ROBERT E. MERRILL, M.D.
Professor and Chairman,
Department of Pediatrics
University of Arkansas School of Medicine
Little Rock, Arkansas



JACK E. MOBLEY, M.D.
Professor and Chairman,
Division of Urology
University of Arkansas School of Medicine
Little Rock, Arkansas



J. T. LING, M.D.
Professor and Chairman,
Department of Radiology,
University of Louisville School of Medicine,
Louisville, Kentucky



WILLIAM A. ELDRIDGE, JR.
Practicing Attorney
Little Rock, Arkansas

Scientific Program

Monday Morning, April 24, 1972

**Room "C", Conference Center
Arlington Hotel**

(enter through exhibit area)

Winston K. Shorey, M.D., First Vice President, Presiding

- 9:00 "Thromboembolic Disease"
Presentation of Case and Discussion
Robert S. Abernathy, M.D.
Marvin L. Murphy, M.D.
Gilbert S. Campbell, M.D.
David L. Barclay, M.D.
- 10:00 "Pre-Marriage Counseling"
Alice Baker Holoubek, M.D.
- 10:15 "Cooperation of Physicians and Clergy"
Joe E. Holoubek, M.D.
- 10:30 Intermission — Visit Exhibits
- 11:00 "Emergency Care of Critical Musculoskeletal Injuries"
Donald B. Kettelkamp, M.D.
- 11:20 "Ambulatory Management of Peptic Ulcer"
William A. Sodeman, Jr., M.D.
- 11:40 "Management of Pulmonary Emphysema"
Joseph H. Bates, M.D.

Monday Afternoon, April 24, 1972

Room "C", Conference Center

Lee B. Parker, M.D., Second Vice President, Presiding

- 1:30 "Diagnosis and Treatment of the Ills of a Medical School"
James L. Dennis, M.D.
- 1:50 "Management of Diarrhea in Children"
Robert E. Merrill, M.D.
- 2:10 "Management of Urinary Tract Infections"
Jack E. Mobley, M.D.
- 2:30 "Management of Cardiac Failure"
James E. Doherty, M.D.
- 2:50 Intermission — Visit Exhibits
- 3:15 "Malpractice"
Discussion Panel
Moderator: Winston K. Shorey, M.D.
William A. Eldredge, Jr., Attorney
Alston Jennings, Attorney
Branch T. Fields, Attorney
Harry Hayes, Jr., M.D.

Tuesday Morning, April 25, 1972

Room "C", Conference Center

Roy I. Millard, M.D., Third Vice President, Presiding

- 9:00 "Experimental Health Delivery Systems in Arkansas"
Francis M. Henderson, M.D.
- 9:20 "Management of Chronic Renal Disease In Arkansas"
William J. Flanigan, M.D.
- 9:45 "Appendicitis: How Can the Radiologist Help in Making the Diagnosis?"
J. T. Ling, M.D.
- 10:15 Intermission — Visit Exhibits
- 10:30 "The Significance of a Lump in the Neck"
Francis E. LeJeune, Jr., M.D.
- 11:00 "Intra-uterine Diagnosis of Congenital and Genetic Abnormalities"
Jean A. Cortner, M.D.
- 11:30 Adjourn for Memorial Service

Related Meetings

ASSOCIATION OF TUMOR CLINIC STAFF MEMBERS IN ARKANSAS

The Association of Tumor Clinic Staff Members in Arkansas will have its annual luncheon meeting and Cancer Seminar beginning at 12:00 noon on Monday, April 24th, in the Mercury Room (Third Floor Tower Suite) of the Arlington Hotel. Thomas E. Bell, M.D., Association chairman, will preside.

SCIENTIFIC SESSION — CANCER SEMINAR

"Recent Advances and Retreats in Treatment
of Carcinoma of the Colon"

Guest Speaker: Robert L. Glass, M.D.

Associate Clinical Professor of Surgery, University of Missouri
School of Medicine, Columbia, Missouri
Surgical Consultant, Ellis Fischel State Cancer Hospital, Co-
lumbia, Missouri

There will be an election of officers and an announcement of the ballot results following the scientific session.

Acceptable for Category II or elective one hour credit by American Academy of Family Practice.

RADIOLOGY

The Arkansas Chapter of the American College of Radiology will have a luncheon and business meeting on Tuesday, April 25th, beginning at 12:00 noon at the Arlington Hotel. Dr. J. T. Ling, Chairman of the Department of Radiology at the University of Louisville School of Medicine, Louisville, Kentucky, will be the speaker for the scientific program. Dr. Ling will speak on "Smooth Muscle Tumors of the G.I. Tract".

EYE SECTION

The Eye Section, Arkansas Medical Society, will meet on Tuesday, April 25th, in the Arlington Hotel. Dr. F. Hampton Roy, program chairman, has announced the following program:

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|------------|--|
| 9:00 A.M. | “Differential Diagnosis and Management of Patients With Keratitis Sicca”
David Paton, M.D.
Professor and Chairman of Ophthalmology, Baylor College of Medicine, Texas Medical Center, Houston, Texas |
| 10:00 A.M. | “Ophthalmology in the Medical Community”
Roger Bost, M.D., Little Rock, Arkansas |
| 10:20 A.M. | Coffee and Doughnuts |
| 10:40 A.M. | “Differential Diagnosis of Lid Elevation”
Mayne Parker, M.D., Little Rock, Arkansas |
| 11:00 A.M. | “Future Trends in the Practice of Ophthalmology”
David Paton, M.D. |
| 12:00 Noon | Business Meeting and Luncheon |

EAR, NOSE AND THROAT SECTION

The Ear, Nose and Throat Section of the Arkansas Medical Society will meet on Tuesday, April 25th, in the Arlington Hotel. There will be a luncheon at 12:00 noon, followed by a business meeting and scientific program. Dr. Francis E. LeJeune, Jr., Chairman, Department of Otolaryngology at the Ochsner Foundation Hospital in New Orleans, Louisiana, will speak on “Carcinoma of the Larynx”. (Dr. LeJeune speaks at 10:30 A.M. on the General Session Program.)

PEDIATRICS

The Arkansas Chapter of the American Academy of Pediatrics will have a luncheon and business meeting on Tuesday, April 25th, in the Arlington Hotel. Dr. W. T. Dungan, program chairman, has announced the following program:

- | | |
|------------------------|--|
| 12:00 Noon - 2:00 P.M. | Luncheon and Business Meeting, Arkansas Chapter of the American Academy of Pediatrics |
| 2:00 P.M. - 5:00 P.M. | Joint Scientific Session with the Arkansas Society of Obstetricians and Gynecologists
All Family Practitioners invited |
| 2:00 P.M. - 2:45 P.M. | “Intra-uterine Diagnosis”
Jean A. Cortner, M.D.
Professor and Chairman, Department of Pediatrics, State University of New York at Buffalo |
| 2:45 P.M. - 3:15 P.M. | “Amniocentesis”
Maxwell R. Baldwin, M.D., Assistant Professor, Department of Obstetrics and Gynecology, University of Arkansas Medical Center |
| 3:15 P.M. - 3:45 P.M. | “Genetic Counseling”
Florence Char, M.D., Associate Professor, Department of Pediatrics, University of Arkansas Medical Center |

- 3:45 P.M. - 4:15 P.M. "Abnormalities of Sexual Development"
David L. Barclay, M.D., Professor and Chairman,
Department of Obstetrics and Gynecology, University
of Arkansas Medical Center
- 4:15 P.M. - 5:00 P.M. Panel Discussion
Moderator: Robert E. Merrill, M.D., Professor and
Chairman, Department of Pediatrics, University
of Arkansas Medical Center
Panelists: Drs. Cortner, Baldwin, Char and Barclay

ANESTHESIOLOGY

The Arkansas Society of Anesthesiologists will meet on Tuesday, April 25th, at 3:30 P.M. in the Arlington Hotel. Dr. William C. North, Professor and Chairman of the Department of Anesthesiology at the University of Tennessee College of Medicine, Memphis, Tennessee, will be the guest speaker. The title of Dr. North's talk will be "The Principles of Anesthetic Management of the Emergency Patient".

ORTHOPAEDICS

The Arkansas Orthopaedic Society will meet on Tuesday, April 25th. Guest speaker will be Dr. Lee Thomas Ford, Assistant Professor of Clinical Orthopedic Surgery at Washington University School of Medicine in St. Louis, Missouri.

OBSTETRICS-GYNECOLOGY

There will be a luncheon and business meeting of the Arkansas Society of Obstetricians and Gynecologists on Tuesday, April 25th, in the Arlington Hotel from 12:00 noon until 2:00 P.M. At 2:00 P.M., members of the Arkansas Society of Obstetricians and Gynecologists and the Arkansas Chapter of the American Academy of Pediatrics will meet for a joint scientific session.

- 2:00 P.M. - 2:45 P.M. "Intra-uterine Diagnosis"
Jean A. Cortner, M.D.
Professor and Chairman, Department of Pediatrics,
State University of New York at Buffalo
- 2:45 P.M. - 3:15 P.M. "Amnio-centesis"
Maxwell R. Baldwin, M.D., Assistant Professor,
Department of Obstetrics and Gynecology, University
of Arkansas Medical Center
- 3:15 P.M. - 3:45 P.M. "Genetic Counseling"
Florence Char, M.D., Associate Professor,
Department of Pediatrics, University of Arkansas
Medical Center
- 3:45 P.M. - 4:15 P.M. "Abnormalities of Sexual Development"
David L. Barclay, M.D., Professor and Chairman,
Department of Obstetrics and Gynecology, University
of Arkansas Medical Center
- 4:15 P.M. - 5:00 P.M. Panel Discussion
Moderator: Robert E. Merrill, M.D., Professor and
Chairman, Department of Pediatrics, University
of Arkansas Medical Center
Panelists: Drs. Cortner, Baldwin, Char and Barclay

Memorial Service

Joint Society-Auxiliary Service, Ballroom, Arlington Hotel

11:30 A.M., Tuesday, April 25

Presiding: Stanley Applegate, M.D., President, Arkansas Medical Society

Invocation: The Reverend Fred Arnold, Oaklawn United Methodist Church
Hot Springs

Reading of names of deceased members of the Society: Dr. Applegate

Reading of names of deceased members of the Auxiliary: Mrs. Harold Langston.
President, Woman's Auxiliary to the Arkansas Medical Society

Memorial Address: George F. Wynne, M.D., Warren

At The River.....Copland

Mrs. Paul Gray, Soprano

Mr. Herman Hess, Accompanist

IN MEMORIAM

Hoyt R. Allen, M.D., Little Rock

Howell W. Brewer, M.D., Memphis

William R. Brooksher, M.D., Fort
Smith

Francis W. Carruthers, M.D.,
Little Rock

Allaire J. Dunklin, M.D., Searcy

William B. Ellis, M.D., Stephens

G. J. Floyd, Jr., M.D., Murfreesboro

Albert W. Lazenby, M.D., Dumas

Robert H. Manley, M.D., Clarksville

Edward D. McKnight, M.D., Brinkley

Stephen D. McMillion, M.D., North
Little Rock

William H. Mock, M.D., Prairie Grove

Hans B. Molholm, M.D., Little Rock

R. W. Pickett, M.D., Texarkana

Joe T. Polk, M.D., Keiser

Charles W. Reid, M.D., Pine Bluff

Charles R. Walton, M.D., Montgomery,
Alabama

Benediction: Reverend Arnold

House of Delegates Meeting

FIRST MEETING

1:00 P.M., Sunday, April 23, 1972

Room "C", Conference Center, Arlington Hotel

Amail Chudy, M.D., Speaker of the House
of Delegates, Presiding

1. Call to Order
2. Roll Call of Delegates
3. Report of Credentials Committee
4. Adoption of minutes of the 95th Annual Session as published in the June 1971 issue of the Journal of the Arkansas Medical Society.
5. Introduction of Guests
6. Report from Chairman of the Council, C. C. Long, M.D., on meetings held since publication of annual report of Council in March issue of the Journal of the Arkansas Medical Society.
7. Reports of Committees

Reports as published in March Journal may be amended by Committee Chairman. All reports will be referred to the Reference Committees.

8. New Business

(Chapter XI, Section 2, of the Society Constitution pertaining to business of the House is quoted as follows for the information of the House:

"All items expected to be considered at the Annual Meeting of the House of Delegates of this Society must be printed in the Journal of the Arkansas Medical Society in the month preceding the Annual Meeting. All resolutions to be submitted to the House of Delegates at the Annual Meeting must be received in the office of the Executive Vice President twenty days prior to said meeting. Any new business proposed during the first session of the House of Delegates of this

Society must have a two-thirds majority of the attending delegates voting for such introduction into this Session. Any new resolutions or other new business proposed for introduction to this House of Delegates after the first session in each Annual Meeting must have two-thirds consent of attending delegates before its introduction.")

9. Announcements of Vacancies on State Boards
10. Selection of Nominating Committee
11. Adjournment

FINAL MEETING

10:00 A.M., Wednesday, April 26, 1972

Room "C", Conference Center

1. Call to Order
 2. Report of Nominating Committee
 3. Elections
- Society Officers:
- President-elect
- First Vice President
- Second Vice President
- Third Vice President
- Treasurer
- Secretary
- Speaker of the House of Delegates
- Vice Speaker of the House of Delegates
- Councilors (one from each of the ten councilor districts)
- Councilors whose terms expire are:
1. Bascom P. Raney, Jonesboro

2. Hugh R. Edwards, Searcy
3. L. J. P. Bell, Helena
4. John P. Burge, Lake Village
5. George F. Wynne, Warren
6. C. Lynn Harris, Hope
7. Robert F. McCrary, Hot Springs
8. William S. Orr, Little Rock
9. Henry V. Kirby, Harrison
10. A. S. Koenig, Fort Smith

American Medical Association Delegates:

Delegate to the American Medical Association House of Delegates (Term of C. C. Long, M.D., expires December 31, 1972)

Alternate Delegate to the American Medical Association House of Delegates (Term of Joe Verser, M.D., expires December 31, 1972)

4. Election to fill vacancies on State Boards
5. Reports of Reference Committees
6. Supplemental Report of Council
7. New Business

Any new resolution or other new business proposed for introduction to this House of Delegates after the first session in each annual meeting must have two-thirds consent of attending delegates before its introduction.

8. Adjournment

REFERENCE COMMITTEES

Reference Committees appointed by the Speaker of the House of Delegates will hold open hearings to discuss the committee reports published in the March Journal, as well as any supplemental reports and resolutions referred to them during the first meeting of the House of Delegates on Sunday, April 23rd. All members are urged to participate in the discussion at the meetings. The committees will meet at 3:30 P.M. on Sunday, April 23, in the Arlington Hotel.

Members of the committees are:

Reference Committee No. 1:

Francis R. Buchanan, M.D., Little Rock, Chairman
L. J. Pat Bell, M.D., Helena
Allie E. Andrews, M.D., Texarkana
Eldon Fairley, M.D., Osceola

Reference Committee No. 2:

Morriss M. Henry, M.D., Fayetteville, Chairman
Kenneth R. Duzan, M.D., El Dorado
James C. Bethel, M.D., Benton
Curry B. Bradburn, M.D., Little Rock

Reference Committee No. 3:

Robert F. McCrary, M.D., Hot Springs, Chairman
James L. Smith, M.D., Little Rock
Kemal Kutait, M.D., Fort Smith
Frank E. Morgan, M.D., North Little Rock

STATE BOARD VACANCIES

Arkansas State Medical Board

A vacancy occurs in the First Congressional District, the counties of which are listed below. Members from these counties are urged to meet in the Arlington Hotel immediately following adjournment of the House of Delegates meeting on Sunday, April 23, to vote for nominees. Nominations should be reported to the convention registration desk.

First District —

Counties in District: Clay, Craighead, Crittenden, Cross, Greene, Lee, Mississippi, Phillips, Poinsett, and St. Francis.

Present Member:

E. D. McKelvey, M.D., Paragould, term expires December 31, 1972, eligible for re-appointment.

Arkansas State Board of Health

A vacancy occurs in the First and Fifth Congressional Districts, the counties of which are listed below. Members from these counties are urged to meet in the Arlington Hotel immediately following adjournment of the House of Delegates meeting on Sunday, April 23, to vote for nominees. Nominations should be reported to the convention registration desk. There must be three nominees for each vacancy.

First District —

Counties in District: Clay, Craighead, Crittenden, Cross, Greene, Lee, Mississippi, Phillips, Poinsett, and St. Francis.

Present Member:

John B. Kirkley, M.D., Jonesboro, term expires December 31, 1972, eligible for re-appointment.

Fifth District —

Counties in District: Conway, Faulkner, Perry, Pope, Pulaski, and Yell.

Present Member:

William E. King, M.D., Russellville, term expires December 31, 1972, eligible for re-appointment.

Woman's Auxiliary

The 48th Annual Session of the Woman's Auxiliary to the Arkansas Medical Society will be held April 23, 24, and 25, 1972, in the Arlington Hotel, Hot Springs, Arkansas. Mrs. John E. Bell of Searcy is Convention Chairman.

REGISTRATION

Sunday, April 23	1:30 P.M. to 5:00 P.M.
Monday, April 24	8:30 A.M. to 12 Noon 3:00 P.M. to 5:00 P.M.
Tuesday, April 25	9:00 A.M. to 10:30 A.M.

Sunday, April 23

2:00 P.M. Pre-Convention Board Meeting, President's Suite
4:00 P.M. President and President-elect's Reception for 1971-72 and
1972-73 officers and board members, President's Suite
All Auxiliary members are welcome

Monday, April 24

9:00 A.M. Opening General Session, Venus Room,
Mrs. Harold D. Langston, presiding
Invocation
Auxiliary Pledge
Introduction of Guests
Mrs. G. Prentiss Lee, Portland, Oregon, President, Woman's
Auxiliary to the American Medical Association
Mrs. Raymond E. Jones, Louisville, Kentucky, President,
Woman's Auxiliary to the Southern Medical
Association
Mrs. W. Myers Smith, Little Rock, President-elect,
Woman's Auxiliary to the Arkansas Medical Society
Greetings
Stanley Applegate, M.D., Springdale, President, Arkansas
Medical Society
Paul C. Schaefer, Executive Vice President, Arkansas
Medical Society
Address of Welcome: Mrs. Thomas E. Burrow, Hot Springs,
President, Garland County Auxiliary
Response: Mrs. C. Lynn Harris, Hope, Past-president,
Woman's Auxiliary to the Arkansas Medical Society
Roll Call and Seating of Delegates: Mrs. James Bethel,
Benton, Recording Secretary
Presentation of Convention Agenda:
Mrs. Harold D. Langston
Convention announcements: Mrs. John E. Bell, Searcy,
General Convention Chairman
Minutes of the Forty-seventh Annual Session
Announcement of Convention Committees
Reading Committee
Courtesy Resolutions Committee
Credentials Committee
Report of Board of Directors
Report of Officers and Committee Chairmen
Unfinished Business
New Business
Election of Nominating Committee
Election of Delegates and Alternates to the 1972
Convention of the Woman's Auxiliary to the
American Medical Association
Presentation of the 1972-73 Budget
Address with question and answer period:
Mrs. G. Prentiss Lee
12:30 P.M. Hospitality Time, Main Dining Room, Arlington Hotel,
Courtesy of Blue Cross-Blue Shield

- 1:00 P.M. Luncheon, Main Dining Room, Arlington Hotel
Honoring: Mrs. G. Prentiss Lee, Mrs. Raymond E. Jones,
and candidates for the Arkansas Auxiliary Member of
the Year
Invocation
Introduction of Guests
Style Show
Recognition of Candidates for Arkansas Auxiliary Member of
the Year, Mrs. Mason G. Lawson, Little Rock, and Mrs.
J. Richard Pierce, Jr., Pine Bluff
Announcement of winner
- 3:00 P.M. Tour Available

Tuesday, April 25

- 8:00 A.M. Past Presidents' Breakfast, Arlington Hotel,
Mrs. Curtis W. Jones, Sr., Benton, Chairman
- 9:30 A.M. Second General Session, Venus Room
Invocation
Roll Call and Seating of Delegates
Reading of Minutes of the First General Session
Convention Announcements
Reports of County Presidents: (These oral reports will be
given on one specific project or program that was
particularly outstanding)
Northwest District: Mrs. Donald W. McMinimy,
Fort Smith, Vice-President, Moderator
Southeast District: Mrs. Charles P. McCarty, Helena,
Vice-President, Moderator
Southwest District: Mrs. Robert Nunnally, Gurdon,
Vice-President, Moderator
Northeast District: Mrs. Asa Crow, Paragould,
Vice-President, Moderator
Report of Registration Committee
Unfinished Business
New Business
Report of Nominating Committee: Mrs. C. Lynn Harris
Election of Officers
Report of Courtesy Resolutions Committee
- 11:30 A.M. Joint Memorial Service with the Arkansas Medical Society,
Ballroom of the Arlington
- 12:15 P.M. Hospitality Time, Fountain Room, Arlington
- 12:45 P.M. Luncheon, Fountain Room, Arlington
Honoring: Mrs. W. Myers Smith, President-elect, Woman's
Auxiliary to the Arkansas Medical Society, Mrs. G.
Prentiss Lee, and Mrs. Raymond E. Jones
Invocation
Introduction of Guests
Presentation of Doctor's Day Awards:
Mrs. James W. Branch, Hope
Greetings from Southern: Mrs. Raymond E. Jones
Presentation of AMA-ERF Awards: Mrs. Ken Lilly,
Fort Smith

Presentation of Membership Awards: Mrs. W. Myers Smith
Installation of Officers: Mrs. Mason G. Lawson, Past President, Woman's Auxiliary to the American Medical Association and the Arkansas Medical Society

Presentation of President's pin and gavel:

Mrs. Harold D. Langston

President's Message: Mrs. W. Myers Smith

2:30 P.M.

Post-Convention Board Meeting



The Hot Springs Young Women's Christian Association is sponsoring an Antique Show and Sale at the YWCA, 500 Quapaw, on April 25th and 26th and extends an invitation to Auxiliary members to attend. Dealers from seven states will be exhibiting and selling. There will be an old-fashioned Country Store and Country Kitchen. Lunch will be available both days and free coffee will be served from 10:00 A.M. until closing. Tickets are \$1.25, available at the door. The hours are 10:00 A.M. until 9:00 P.M. on the 25th and 10:00 A.M. until 5:00 P.M. on the 26th.



Scientific Exhibits

The scientific exhibits will be located in the mezzanine lobby area and the area of the Conference Center adjacent to the technical exhibits. All members are encouraged to visit the exhibits as they are an integral part of the scientific program.

The following exhibits will be on display:

Gilbert Campbell, M.D., Little Rock

G. Doyme Williams, M.D., Little Rock

William J. Flanagan, M.D., Little Rock

Thomas E. Brewer, M.D., Little Rock

Fred T. Caldwell, Jr., M.D., Little Rock

"Renal Preservation and Transplantation"

Department of Medicine, University of Arkansas Medical Center, Little Rock, and the

Department of Surgery, University of Arkansas Medical Center, Little Rock

"Coronary Artery Disease, Diagnosis and Treatment"

John E. Allen, M.D., Little Rock

"Surgery for Coronary Artery Disease"

Harry Hayes, Jr., M.D., Little Rock

"Rhinoplasty"

Reuben Setliff, III, M.D., El Dorado

(Title To Be Announced)

Dowling B. Stough, III, M.D., Hot Springs

(Title To Be Announced)

Ralph A. Downs, M.D., Little Rock

"Congenital Polyps of the Prostatic Urethra"

R. Barry Sorrells, M.D., Little Rock

Kenneth G. Jones, M.D., Little Rock

H. Austin Grimes, M.D., Little Rock

"Methods of Closure of Finger Tip Injuries"

Warren C. Boop, Jr., M.D., Little Rock

(Title To Be Announced)

Ellery C. Gay, M.D., Little Rock

"Rhinoplasty"

A. J. Brizzolara, M.D., Little Rock

(Title To Be Announced)

Carl L. Williams, M.D., Fort Smith

(Title To Be Announced)

Frederick T. Fraunfelder, M.D., Little Rock

Calvin Hanna, P.H.D., Little Rock

J. Mayne Parker, M.D., Little Rock

"Spheroidal Degeneration"

Dale Alford, M.D., Little Rock

(Title To Be Announced)

Charles Pearce, M.D., New Orleans, Louisiana

"Coronary Artery Disease, Surgical Treatment"

Division of Maternal and Child Health, Arkansas

Department of Health

Reginald C. Ramsay, M.D., Little Rock

"Blood Alcohol Study"

"Family Planning"

"Physiotherapy"

Arkansas Rehabilitation Service

George H. Hassard, M.D., Hot Springs, Medical Director

"Hot Springs Rehabilitation Center School for the Handicapped"

Arkansas Rehabilitation Service

Mr. L. D. Kerr, Little Rock, Information Director

"Arkansas Rehabilitation Services"

Mrs. Neil Barnhard, Reference Librarian

University of Arkansas Medical Center

"Information Service, University of Arkansas Medical Center Library"

Technical Exhibits

The business firms who purchase exhibit space at our Annual Session contribute a great deal to the financing, as well as to the educational aspects, of the meeting. The number of visits to the technical exhibits is the only criterion by which these companies can judge the value they receive from the investment in booth rental, displays, and employee's time. You will be rewarded for the time you spend visiting the exhibits. Following are descriptions of displays to be featured.

ORTHO PHARMACEUTICAL CORPORATION

Welcome to Booth No. 1 where Ortho Pharmaceutical Corporation is proud to present the most complete line of medically accepted products for the control of conception. Also on display will be our well-known products for the treatment of various forms of vaginitis. Your questions will be welcome.

STUART PHARMACEUTICALS

A cordial invitation is extended to all members and guests attending to visit the Stuart Pharmaceuticals booth. Trained representatives will be in attendance to answer questions on our products: MYLANTA®, CHEWABLE SORBITRATE®, SORBITRATE® Sublingual and Oral, KINESED®, STUARTNATAL TM 1 + 1, and others.

SMITH, MILLER AND PATCH, INC.

Smith, Miller and Patch, Inc., New Brunswick, New Jersey, will feature a new non-barbiturate hypnotic, SOMNAFAC and SOMNAFAC FOURTE; DECONAMINE, a potent oral antihistamine and decongestant in three dosage forms; VASOCIDIN Ophthalmic-Otic Solution; our hematinics, VITRON-C and VITRON-C PLUS; and our specialty bowel regulator, KONDREMUL.

RATHER, BEYER AND HARPER

Representatives of Rather, Beyer and Harper will have brochures and all information on the Arkansas Medical Society group plans of insurance—specifically the Income Protection Plan which is now issued on a guaranteed renewal basis, the Office Overhead Expense Plan and the new Million Dollar Professional Liability Policy. Records will be available so that each doctor may review the insurance coverages which he has under the group plans of the Arkansas Medical Society.

ARKANSAS BLUE CROSS-BLUE SHIELD

Our booth is for your convenience and we welcome your visit. Blue Cross-Blue Shield's representatives are always ready to help solve any case problem or answer your questions. The medical profession has been largely responsible for our growth in membership which now totals over 500,000—an achievement of which we should all be proud.

G. D. SEARLE AND COMPANY

You are cordially invited to visit the SEARLE booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be information on OVULEN®, DEMULEN®, ENOVID®, ALDACTAZIDE®, FLAGYL®, LOMOTIL®, PRO-BANTHINE® and other drugs of interest.

SCHERING CORPORATION

SCHERING LABORATORIES invites you to visit their exhibit, Booth Space No. 9, where their representatives will be available to discuss with you any questions you may have on ETRAFON®, DRIXORAL®,

VALISONE®, GARAMYCIN® Injectable, CELESTONE®, SOLUSPAN® Injection, or any other Schering Product.

SANDOZ PHARMACEUTICALS

Sandoz Pharmaceuticals cordially invites you to visit our display at Booth No. 10, where we are featuring MELLARIL, HYDERGINE, SERENTIL, CAFERGOT P-B, FIORINAL AND BELLERGAL.

ELI LILLY AND COMPANY

You are cordially invited to visit the Lilly exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products.

MEAD JOHNSON LABORATORIES

The Mead Johnson Laboratories' exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about Halotex, Vasodilan, and Anticonstipants.

DABBS SULLIVAN, TRULOCK AND COMPANY, INC.

Dabbs Sullivan, Trulock and Company, Inc., will be represented by Melvin Spear who will be happy to answer your questions on securities and assist you in establishing a sound investment program. Brochures will be available.

THE ST. PAUL INSURANCE COMPANIES

As the endorsed carrier for Medical Malpractice insurance our purpose in providing an exhibit is strictly informational. Our booth will be staffed by company personnel who will be happy to attempt to answer any questions that the doctors may have. We will also have information available concerning Medical Malpractice coverage, related coverages and a list of agents throughout the state of Arkansas who represent our company and through whom the doctors may purchase these coverages.

ABBOTT LABORATORIES

Abbott Laboratories cordially invites you to our booth for information on two Abbot specialties—Iberet®-500 and Iberet-Folic-500®. Each contains 500 mg. of Vitamin C, Controlled-release iron, and Therapeutic B-Complex. In addition, Iberet-Folic-500 contains 350 mcg. of Folic Acid. Enduron® (methyclothiazide) will also be featured.

WILLIAM P. POYTHRESS AND COMPANY, INC.

Our medical representative, Mr. T. L. (Bru) Brubaker, will be available to supply you with literature, samples and technical information on ANTROCOL, BENSULFOID LOTION, the MUDRANE combinations, PANALGESIC, SOLFO-SERPINE, SOLFOTON, SYNIRIN, T C S, TROCINATE and URO-PHOSPHATE.

CAMP TAHKODAH

A summer camping experience is one of the nicest things that can happen to a boy. To master skills of horsemanship, archery, and canoeing—to experience the peace and serenity of the out-of-doors—this is part of a boy's heritage too often missed today. Doctors seem to be keenly aware of this; many of our campers are doctor's sons or boys to whom doctors have recommended Camp Tahkodah. Owned by Harding College, Camp Tahkodah is in its thirtieth year.

LAKESIDE LABORATORIES, INC.

Lakeside Laboratories, Inc., exhibit includes Imferon, Cantil, Ircan FA, Mercuhydrin, Metahydrin, Metatensin,

Norpramin, the Iron Learning System and the Depression Learning System.

DYNAPOWER MEDONICS CORPORATION

Dynapower Medonics Corporation manufactures the Theramatic Mark VII-3, the most powerful pulsating high frequency diathermy unit on the market today that meets the FDA and FCC standards and requirements. We also have acquired the Tower fracture and orthopedic equipment and tables.

ASTRA PHARMACEUTICAL PRODUCTS, INC.

Information and descriptive literature pertaining to Xylocaine® (lidocaine) and Citanest (prilocaine) local and topical anesthetics, and the intravenous use of Xylocaine in the treatment of life-threatening cardiac arrhythmias will be available at the Astra booth.

PRO SERVICES, INCORPORATED

PRO Services, Inc., is the administrator of the Arkansas Medical Society's Program for Keogh and Professional Corporations.

PRO Services, without fee, will:

Advise you on whether to incorporate your practice or use Keogh.

Assist in getting you incorporated.

Work with your attorney and accountant in establishing all of the tax-qualified benefit programs when you are a Professional Corporation.

Handle all of the investments and administration details for Pension, Profit Sharing and Fringe Benefit Plans. MERRILL LYNCH, PIERCE, FENNER AND SMITH, INC.

The Merrill Lynch display will feature a Telequote III stock quote machine to provide doctors with up-to-date prices on any security of interest to them. Account Executives from the firm's Little Rock office will be on hand to answer questions and discuss the many services Merrill Lynch offers to physicians.

BRISTOL LABORATORIES

You are cordially invited to visit our exhibit reflecting Bristol's leadership and enduring commitment to the manufacture of lifesaving antibiotics.

For your consideration, the following Bristol antibiotics are featured: Versapen® (hetacillin); Tetrex® (tetracycline phosphate complex); Kantrex® (kanamycin sulfate); Pro-staphlin® (sodium oxacillin); Bristamycin® (erythromycin stearate); Salutensin® (hydroflumethiazide, reserpine and protoveratrine A); and Naldecon® (antihistamine decongestant).

CUMMINGS X-RAY COMPANY

Cummings X-Ray Company plans to show our new 90 second Mustang Processor that sells for less than \$4,000; ten have already been installed in Arkansas. It is supplied with the new Smartway Replenisher System, capacity 45 inches of film per minute, 110 volt operation, no cooling required. It is 18 inches high, 22 inches wide, 36 inches long, and can be installed through the wall mounting.

We will also show our new VS-4 E.C.G.; the only one that is U.L. approved for use in cardiac care with monitors, pacers, etc.

The X-Ray to be shown is a new 30-90 portable.

WILLIAM H. RORER, INC.

William H. Rorer, Inc., takes pride in exhibiting its

fine pharmaceutical products at this convention. Our representatives will gladly discuss MAALOX, CAMALOX, ASCRIPTIN, QUAALUDE, and other products with you. MR. JAMES M. ALLEN, C.L.U.

Visit exhibit number 33 for a discussion with James M. Allen, C.L.U., on the Professional Corporation and its advantages to the doctor.

USV PHARMACEUTICAL CORPORATION

From a manufacturer of vitamins in 1936 to a major pharmaceutical house, offering many major pharmaceutical products, in 1972 is a big step in such a relatively short time. It will be the purpose of USV Pharmaceutical Corporation's exhibit to give you an idea as to what has transpired and what the future holds for the NEW USV and you!

E. R. SQUIBB AND SONS, INC.

E. R. SQUIBB AND SONS, INC., has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed.

At our booth we will be pleased to present up-to-date information on these products and services.

FIRST ARKANSAS LEASING CORPORATION

First Arkansas Leasing Corporation will display a group of pictures representing the various types of equipment that can be leased by the medical profession; brochures explaining our leasing program will be available; the "Advantages of Leasing" will be presented by slide projector; a FALCO representative will be available for lease quotations and for questions concerning leasing in general as directed and governed by the Internal Revenue Service. THE UPJOHN COMPANY

Our exhibit at your meeting of April 23-26, 1972, will include antibiotics, featuring Cleocin and Lincocin as well as antidiabetes products, Orinase and Tolinase. We will also have a new device which we have just marketed that is an aid in the detection of endometrial carcinoma.

PITNEY-BOWES, INC.

PITNEY-BOWES' LEDGER CARD BILLING SYSTEM—Pitney-Bowes has come to the rescue . . . with a paper-handling system that's automatic. Billing still isn't fun, but it's a lot easier and faster. For you eliminate manual typing, folding, inserting, sealing and affixing postage. Yet even the most automated system costs less per month than you'd pay a girl per week. Result: Girls, untied from old-fashioned billing, are now free to do what they were hired to do. This system calls for no special forms. You use your present ledger cards . . . with rocket speed billing short cuts. You eliminate typing errors and every bill shows every charge and every payment, ending need for explanations that slow down payments. Bills are clear and permanent so they can be filed and referred to for taxes, etc. The system is perfect for doctors and dentists . . . anyone, in fact, who uses ledger cards and sends out hundreds of bills a month. If you don't use ledger cards, it may pay you to look into the ledger card system.

A. H. ROBINS COMPANY

You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome

the opportunity to discuss products of interest with you.
RUCKER PHARMACAL CO., INC.

The representatives at the Rucker booth will be happy to discuss products of interest. A cordial invitation is extended to all members of the Society to visit the booth.
ARKANSAS REGIONAL MEDICAL PROGRAM

Members of the medical profession are encouraged to visit with representatives of the Arkansas Regional Medical Program in booth space #13. RMP welcomes your questions and comments regarding its programs.

WM. T. STOVER COMPANY, INC.

The William T. Stover Company, Inc., of Little Rock, will have a booth staffed with informed and qualified representatives—eager to welcome you and assist in any manner possible—as well as to show you the up-to-date

developments in the medical and surgical industry.

CIBA PHARMACEUTICAL COMPANY

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House of Delegates Business Affairs

Reports printed below are brought to the attention of individual members and the county medical societies. The items reported here represent those received in time for publication in advance of the meeting. All reports will be referred to reference committees. Members are urged to attend the open hearings of the reference committees to express their views. Reference Committee hearings are scheduled for 3:30 P.M. on Sunday, April 23.

ANNUAL COMMITTEE REPORTS

Committee on Public Health

(Rural Health)

Ben N. Saltzman, M.D., Chairman

The Committee on Public Health this past year has been involved with several aspects of Public Health as it affects the medical profession. The chairman:

Attended a Regional Meeting of the AMA Council on Environmental and Public Health in San Antonio, Texas, representing Arkansas. Numerous environmental and public health matters were discussed and recommendations made.

Represented the committee on an Emergency Health Services Task Force, under the auspices of Comprehensive Health Planning in Little Rock.

Served as moderator on a panel at the National Rural Health Conference in Atlanta, Georgia. The theme was "Health as a Community Affair."

Attended the annual Public Health Association meeting in Hot Springs, Arkansas.

Serves on the Regional Medical Program Ad-

visory Group as a representative of the Arkansas Medical Society.

Serves on the Cancer Committee of the Regional Medical Program.

Collaborated on the preparation of a diet manual for the State Health Department.

Continues to serve on the National Health Safety Services Advisory Council for Health, Education and Welfare.

Serves on the Governor's Advisory Council on Aging and on the Governor's Advisory Council for Developmental Disabilities.

Represented the Committee on Public and Rural Health at the State 4-H Congress in Little Rock and presented awards to the Health winners as a representative of the Arkansas Medical Society.

Maintained liaison with the State Health Department.

Attended a meeting of the Council on Emergency Health Services.

Continued activities in many aspects of volunteer health services, including tuberculosis and respiratory disease, cancer, mental retardation, and aging.

The committee has not held a meeting this past year. However, it has been kept informed of the activities in public health with which it is concerned.

Sub-Committee on Tuberculosis

Harley C. Darnall, M.D., Chairman

There has been no called meeting of the Sub-Committee on Tuberculosis for the past year. No business has been conducted from this committee.

**Sub-Committee on Physical Fitness and
School Health**

Robert H. Langston, M.D., Chairman

The Sub-Committee on Physical Fitness and School Health sponsored the Third Annual Symposium on Athletic Injuries at the University of Arkansas, Fayetteville, Arkansas, on May 8, 1971.

The welcome was given by Frank Broyles, University of Arkansas football coach, with other featured speakers being Jim Bone, Trainer—University of Arkansas; Dr. Robert Watson, Neurosurgeon, Little Rock, Arkansas; Dr. George Chambers, Orthopedic Specialist, University of Arkansas Medical Center; and Dr. Joe Hall, Fayetteville, Arkansas, presented the medical aspects of the program.

The meeting adjourned at 2:00 p.m. so that all participants could attend the Red-White football game.

The Fourth Annual Red-White Symposium is now in the planning stage and will be held sometime in May of 1972.

Committee on Mental Health

William O. Young, M.D., Chairman

The Committee on Mental Health has continued to work on several projects in which they have been involved in previous years. Members of the committee are involved in the Psychiatric Residency Training Program at the State Hospital, University of Arkansas Medical Center, and at the Fort Roots Veterans Administration Hospital. The postgraduate seminars for training general physicians and other specialists in psychiatric interviewing and short term therapy have continued into their sixth year and are still quite popular with members of the Medical Society. Between fifteen and twenty percent of the members of the Arkansas Medical Society have attended these seminars either in Little Rock or in various areas in the State. The seminars have gained a good deal of recognition throughout the country.

Several members of the committee have appeared in television interviews discussing various social problems.

It is interesting that the reorganization of the State Government, which took place last year, is very similar to the plan that was proposed in 1965 by a group that included members of our committee and that was approved by the House of Delegates of the Arkansas Medical Society at their annual meeting that year.

We feel that the Arkansas Medical Society, as a whole, is continuing to take an active part in dealing with the mental health problems of the citizens of Arkansas.

Immunization Sub-Committee

Wilbur G. Lawson, M.D., Chairman

A meeting of this committee at the November meeting site of the Arkansas Medical Society in Little Rock enabled this committee to complete the preparation of the new edition of Immunization Placards. These were able to be prepared in time for distribution at the April meeting of the Society in Hot Springs.

Two conference telephone meetings were held during the year, including one October 22 for the purpose of discussion and review of the new policy by the American Academy of Pediatrics and U. S. Public Health Service regarding abolition of mandatory smallpox vaccination. All members participated. This makes the second of two major infectious disease programs that have been abolished by the Public Health Service, first typhoid and then smallpox. The acceptance of the decision has certainly not been unanimous even at the national committee level, as I have learned aside from the public announcements. In any case, as now constituted, this committee is composed of five pediatricians and one general practitioner. The pediatricians are bound by a resolution passed in the Pediatric Section April 1970 to abide absolutely by the pronouncements of the Red Book Committee of the American Academy of Pediatrics. Accordingly, there was no significant debate allowable about these decisions.

The chairman has prepared a report to Dr. Applegate requesting that he and the House of Delegates review the role of this committee in the organizational table of the Society. As presently constituted and under existing policy, the Sub-Committee has no power of function in critical review of immunization policies or programs and their specific application in our State. Since the activities have become merely one of passing on the policies of the American Academy of Pediatrics, this could very easily be accomplished through the Public Health Liaison Committee and affect economies in the administrative set-up of the Society.

Sub-Committee on Traffic Safety

Carl L. Williams, M.D., Chairman

The Sub-Committee on Traffic Safety assisted

in the planning and presentation of the third annual Governor's Emergency Health Conference in Little Rock on September 11, 1971.

The Committee also met and drafted a resolution supporting the development of training programs for Emergency Health Care Technicians and presented this resolution to the House of Delegates of the Arkansas Medical Society during the year. This resolution was approved by the House of Delegates at the April 1971 meeting. An attempt at a pilot program for training of Emergency Health Care Technicians, through the Junior Colleges, was unsuccessful in that funds could not be obtained for the implementation of this more advanced curriculum. In this area, however, the Committee has assisted the Arkansas Trauma Committee in implementing several 80-hour courses in Emergency Health Technician training throughout the State.

Sub-Committee on Liaison with Vocational Rehabilitation

Paul G. Henley, M.D., Chairman

The Sub-Committee on Liaison with Rehabilitation has had no significant problems to arise for a meeting since the 1971 Arkansas Medical Society Meeting.

The Chairman and Administrative members of the Rehabilitation Service have kept each informed.

There will be areas for mutual discussion and action at the annual meeting. One of these areas is the need for study of the disposition of rehabilitation cases that involve heart and vascular problems as related to in-state and out-of-state services.

Mr. Russell Baxter, Commissioner of the Rehabilitation Service, reports that:

- A. This has been the smoothest year yet as related to physicians.
- B. Fees by doctors have not been a problem except in isolated cases and these were satisfactorily adjusted.

Committee on Medical Education

C. Lewis Hyatt, M.D., Chairman

The Committee on Medical Education met at the Coachman's Inn in Little Rock on January 9, 1972, at 10:30 A.M., prior to the Council meeting at noon on the same date. The Council Committee on Liaison with the Medical School was invited to meet with us since the material for discussion overlapped in this particular study, and they all attended. Of the Medical

Education Committee, Dr. Shorey and Dr. Hyatt were present. Dr. Applegate, Dr. Morriss Henry and Miss Leah Richmond were guests. Communications prior to the meeting were received from Dr. Lee Parker, Dr. John Ruff and Dr. Marlin Hoge.

In regard to postgraduate education, it appears there is adequate opportunity for any practicing physician in Arkansas to avail himself of refresher study through courses at the Medical School and through other organized continuing education courses and by the excellent program of the Regional Medical Program.

Regarding medical education itself—many, many facets and factors were discussed. The committee agreed unanimously on only about one point—that many more general or family practitioners are required by Arkansas if the critical need for primary medical care is met with any degree of success. After this, there was only spirited discussion of some of the many suggestions made as to how more primary physicians could be provided.

Dr. Shorey gave an accurate statistical account of medical education in Arkansas and answered and explained many of the questions.

It must be truthfully said that there is a difference in philosophy of practicing physicians and medical educators in Arkansas. The Medical School is capable of turning out highly trained and capable physicians. Not enough are being graduated. It can also be said that the climate for production of general practitioners has not been of the best in any medical school, including Arkansas, over the past few years. This situation may be improving. Leaders of the Arkansas Medical Society have made numerous requests and suggestions concerning production of medical manpower in this State, especially during the last twelve years. Almost none of these suggestions have been considered because of numerous reasons—finances, lack of communication between the Medical Center and the private practitioners; the reluctance of some groups, especially the surgical specialty groups, to teach general practitioners; lack of space and personnel for teaching; and alleged lack of students in Arkansas capable of learning medicine.

It behooves all of the physicians of Arkansas to acquaint themselves with these problems and situations and express themselves freely in order for some development and implementation of

ideas to occur.

It is an indictment of the medical profession—both practicing physicians and educators—that the Federal government, State government, citizens, students and many other groups are having to push us into producing physicians to furnish primary care.

Some of the points discussed by this committee with no real conclusions are these:

1. Continuous year-round operation of the Medical School to allow graduation in three years.
2. Increase of enrollment in the school year as presently organized.
3. Starting two new classes each year to more fully utilize space, equipment and personnel.
4. Enroll more students from rural areas and small towns.
5. Enroll well rounded students who are below "B" average.
6. Screen and assist non-accepted students to make them eligible for admission to Medical School or to one of the paramedical branches.
7. Train a large number of physician's assistants.
8. Take no more out-of-state students until all qualified Arkansas students are admitted.
9. Resume compulsory Preceptee Program with primary physicians over the State.
10. Require general or family practice prior to any specialization or as qualification for M.D. degree.
11. Consider starting another medical school in Arkansas in order to use the facilities of the numerous fine hospitals in Little Rock and other areas of the State to train those students who desire to do a primary private practice.

The committee requests comments, suggestions, and recommendations on the above or any other points toward solution of this complicated problem.

Sub-Committee on State Health and Medical Resources for Civil Defense

Edgar J. Easley, M.D., Chairman

It is the opinion of the sub-committee that the present approach of Civil Defense University Extension Program and Civil Defense officials, along with other State agency representatives,

provides an excellent training and assistance program for local communities to develop disaster preparedness plans. In view of this program, the committee sincerely recommends that county medical societies or medical councils support and participate in the community Emergency Health Planning Program.

In conjunction with the overall Emergency Medical Preparedness Program, it is very gratifying to receive information that the Emergency Medical Supply Services increased their stockpile by seventy percent during 1971. There are fifty-eight community hospitals actively participating in the Emergency Medical Supply Service Program as compared to thirty-five in 1970.

A representative from the Division of Emergency Health Services, State Department of Health, has continued to work with the Civil Defense University Extension Program and Civil Defense officials, and our committee in the health and medical phase of the workshops. This phase is an area where the local county medical societies or councils should and are encouraged to provide their knowledge, support and assistance in developing an appropriate emergency medical annex for their communities. During 1971, ten workshops were scheduled and a total of eight county emergency medical annexes completed. This brings to a total of fifteen counties completed with seven additional scheduled for 1972. As a matter of information, the health and medical annex to the county operation plan was signed by the County Health Officers or a physician that volunteered to chair the committee.

The Arkansas State Department of Health, along with other agencies, joins a statewide radio network. A statewide two-way network has been placed in operation by the Civil Defense and Disaster Relief agency and will tie-in nearly every state and county agency involved in disasters. From the Governor's office on down, persons and organizations with a need to know will be able to send and receive urgent information. The State Police, Game and Fish Commission, Forestry Department, State Highway Department, State Military Department, Civil Air Patrol, State Social Services, State Health Department and others having emergency responsibilities will be reached in emergencies by communications tie-up. The all radio hookup will use four ultra-high frequency base stations, four UHF repeaters, four high band repeaters and

ten modified high band repeaters with tone activating equipment. Following a demonstration of the new system, Governor Dale Bumpers said the emergency communications system will greatly increase the overall emergency capability of State and local governments in Arkansas.

The chairman, Sub-Committee on State Health and Medical Resources for Civil Defense, wishes to acknowledge the excellent support from the medical societies for their part in acquiring this statewide radio network. This new system will certainly increase the capacity of health and medical disaster services throughout the State, particularly if the procedures are aligned with the Arkansas Hospital Emergency Radio Network. At the present time, there are twenty-three hospitals on the Arkansas Hospital Emergency Radio Network.

Along with the improvement of communications, the Civil Defense University Extension Program, State College of Arkansas, has redirected their approach in assisting local government emergency preparedness workshops toward problems created by natural and man-made emergencies. Heretofore, Civil Defense University Extension Program workshops have developed extensive plans and programs to deal with the effects of nuclear weapons.

Improvements in the cooperative programs will be forthcoming during 1972. Additional coordination and intensified public information processes are needed.

Committee on Insurance

Harry Hayes, Jr., M.D., Chairman

The committee has met several times over the past year and has carried on an active correspondence. We have attempted to provide information and guidance to individual members on their particular problems. The committee has been active in the professional liability area, including dissemination of information to members, participation in panel discussions, and, when possible, assisted insurance companies who write this type of coverage here in Arkansas. We understand that the Society-endorsed program now has enrolled more than 50 percent of the membership of State Society. There are other developments in this field that are just now getting underway. We hope that a panel discussion at the State Society Medical Meeting in April 1972 will provide a suitable forum for discussion of these problems.

Committee on Liaison with the Nursing Profession

Frank T. Padberg, M.D., Chairman

The Committee on Liaison with the Nursing Profession of the Arkansas Medical Society planned, with the Liaison Committee of the Arkansas State Nurses Association, a joint seminar meeting held at the annual meeting of the Arkansas State Nurses Association in West Memphis on October 19, 1971. There was poor attendance by the doctors of the Arkansas Medical Society at this excellent meeting.

It is planned and hoped that there will be a joint dinner meeting at the future annual Arkansas State Nurses Association meetings.

Your committee chairman has attended other planning groups to consider health care and nursing manpower throughout the year.

Committee on Medicine and Religion

C. R. Ellis, M.D., Chairman

Your committee has met three times since our Arkansas Medical Society meeting in April 1971, all three of these meetings being held in Little Rock. The attendance in May 1971 was very good, but the attendance at each of the other two meetings of August 20, 1971 and February 6, 1972 was poor.

In an effort to involve more physicians over the State in the work of this Medicine and Religion Committee, we have sent out three separate letters in an effort to get the names of physicians over the State to contact regarding the work of this committee. We mailed out invitations to the physicians so designated to us to a meeting at the Arkansas Baptist Medical Center on August 20, 1971, with extremely poor response from these representatives of the constituent medical societies. We hope that by sending a copy of our committee meeting minutes and other information to these physicians, we can get them interested enough to attend a meeting once or twice a year in the central part of the State. We would also like to get these constituent society representatives interested enough to invite some of us into their counties for any help we might be able to give them in an effort to stimulate interest and work in this field of endeavor.

Your State Society committee has gone forward, however, in its plans. Your program committee for the Annual Session, under the leadership of Dr. Winston Shorey, has given this committee a

place on the program Monday morning, April 24, 1972, and we have extended an invitation to Dr. Joe E. Holoubek of Shreveport, Louisiana, who has had a great part, if not the most outstanding part, in the development of a program on Medicine and Religion for the Shreveport Medical Society. We have also obtained another exhibit from the American Medical Association Committee on Medicine and Religion to display at the Arkansas Medical Society meeting in April of this year. We hope to have an exhibit each year and improve it, even with some color slides of local activities in Arkansas in the field of Medicine and Religion, within the next few years. Don Corley, Th.D., of Arkansas Baptist Medical Center has been invited by the committee to help us man the booth during the Arkansas Medical Society meeting in April, 1972.

Your committee has also made arrangements for a Symposium on Medicine and Religion to be held at the University of Arkansas Medical Center Auditorium on October 28, 1972, with the following keynote speakers:

Dr. Milford Rouse, Dallas, Texas (Former AMA President)

Rev. Richard Halverson, Washington, D. C. (Active in the President's Prayer Breakfasts)

The general topic for this symposium will be: "Strangers When We Meet—Physicians and Ministers".

The committee in charge of this symposium on October 28, 1972, is made up of representatives from the sponsoring organizations. Three of these men are from your Committee on Medicine and Religion. This sub-committee is as follows:

Dr. Fred Henker, Chairman, and Dr. Carl Wenger, Assistant Chairman, representing the Arkansas Medical Society's Committee on Medicine and Religion.

Chaplain Martin Busby, representing St. Vincents' Infirmary.

Dr. Fred Henker, representing the University of Arkansas Medical Center.

Dr. Alvin Strauss, Jr., representing the Arkansas Academy of Family Physicians.

Dr. Don Corley, representing the Arkansas Baptist Medical Center.

Chaplain Jim Conard, representing the Arkansas State Hospital.

Chaplain Robbie Goff, representing the Veterans' Administration Hospital.

The above listed sub-committee is working on details of this meeting in October 1972 and will be sending out information to each physician and many of the ministers in Arkansas within the next two or three months. We, your Committee on Medicine and Religion, very urgently request the members of the Arkansas Medical Society to attend this meeting on October 28, 1972, at the University of Arkansas Medical Center Auditorium in Little Rock. I believe this is on the same day as one of our University of Arkansas football games. Please make your plans long in advance to attend.

Your committee chairman has plans to attend the Medicine and Religion Workshop sponsored by the American Medical Association in Chicago on February 12, 1972. We hope that by obtaining new ideas we can, by consistent effort, stimulate interest in the field of medicine and religion in every constituent medical society in our State. At its last meeting, February 6, 1972, your committee voted to offer its assistance to any specialty group or other medical group in our State in obtaining knowledgeable and interesting speakers on the subject of medicine and religion. We request any medical group to make their needs known to this committee in their plans for any program in our State. As many of you may already know, one of our own Society members, Dr. Joe Norton of Little Rock is a member of the American Medical Association Committee on Medicine and Religion. He will assist us, I am sure, in any way that he can.

I take this opportunity to express my sincere appreciation to the members of the State Society Committee on Medicine and Religion as follows:

Dr. John Miller, Camden, Arkansas

Dr. Alvin W. Strauss, Jr., Little Rock, Arkansas

Dr. Carl E. Wenger, Little Rock, Arkansas

Dr. Kenneth A. Siler, Harrison, Arkansas

Dr. Fred O. Henker, Little Rock, Arkansas

Our committee certainly appreciates the work of Dr. Don Corley of the Arkansas Baptist Medical Center, who has been serving as our liaison with the clergy.

Committee on Arrangements for Annual Session

Winston K. Shorey, M.D., and

W. Martin Eisele, M.D., Co-Chairmen

The Annual Session Committee met on September 19, 1971 with President Applegate, President-elect Watson, Executive Vice President

Schaefer, and Miss Richmond in attendance. As requested by President Applegate, responsibilities for the 1972 annual session were divided between a co-chairman for the scientific session and a co-chairman for social affairs.

Individuals were nominated to take responsibilities for specific activities at the annual session, and provision was made to contact these individuals requesting that they assume the respective responsibilities.

The general format and schedule of events for the annual session were discussed and approved. It was agreed that the scientific session will be devoted to topics of general interest with orientation toward physicians in general practice. It also was agreed that the scientific program will be provided by the faculty of the University of Arkansas School of Medicine, supplemented by guest speakers invited by specialty groups.

The committee agreed that a golf tournament will not be scheduled this year. This action is in accord with a recommendation of the Council of the Arkansas Medical Society approved at its October, 1970 meeting.

As usual, Executive Vice President, Mr. Paul Schaefer, and Miss Leah Richmond have carried the work load in preparing for the annual session in their customary effective and efficient manner.

Committee on Constitutional Revision

Lee B. Parker, Jr., M.D., Chairman

In accordance with the recommendation of the House of Delegates at the 1971 Annual Session, the Constitutional Revision Committee has proposed that the functions of the Committee on Medical Education and the Committee on Continuing Education be combined into one committee. The Constitutional Revision Committee proposes changes in the By-Laws, which are submitted under Constitutional Amendments in a following section.

In February, the committee received a suggestion to amend the Constitution to accept graduates of foreign medical schools as members of the Medical Society. Also received was a list of recommendations of a special committee to review the organization of the Arkansas Medical Society.

The recommendations of the Constitutional Revisions Committee will be reported to the House of Delegates at its first meeting on April 23rd.

Senior Medical Day Committee

Ralph A. Downs, M.D., Chairman

The following is a report of the Senior Medical Day Banquet.

The Senior Medical Day Banquet, sponsored by the Arkansas Medical Society, was held at the Little Rock Country Club on April 29, 1971.

This function was attended by the graduating seniors of the University of Arkansas Medical School with their guests. A cocktail party preceded the dinner.

Dr. Stanley Applegate, President of the Arkansas Medical Society, was the master of ceremonies and introduced the guest speaker, the Honorable Dale Bumpers, Governor of Arkansas. Mr. Bumpers gave an interesting and informative talk on the Prospectus of Medicine, both in Arkansas and on a National level. The festivity was further enhanced by the presence of Mrs. Dale Bumpers.

As a matter of information, this is an annual function presented and financed by the Arkansas Medical Society as a means of honoring the graduating seniors of the University of Arkansas Medical School. The purpose of this banquet is to introduce the seniors to the Arkansas Medical Society and its officers and is projected as a vehicle of good will and, hopefully, as an inducement to the seniors to remain in the State of Arkansas for their medical practice.

Arkansas State Advisory Committee to the Selective Service System

Gerald H. Teasley, M.D., Chairman

The job as Chairman of the Arkansas State Medical Advisory Committee to Selective Service has become a thing of the past for me. I resigned from the committee this last year on reaching my present age and am certain that Dr. L. A. Whitaker, who was appointed as Chairman in my place, will do an excellent job in determining the solution of problems which come before the State Advisory Committee.

This past year had no particular problems insofar as the action of the committee was concerned. This includes only the period to June 30th, the date of my resignation. With the decrease in military activity, it is hoped that there will be very few people called to active duty as a result of the draft. I am certain that many of you have noted the fact that military service is hoping to reduce the number of physicians on active duty by several thousands. This seems a

wise thing to do and should certainly relieve a great many of the future physicians from worries about being drafted to active duty.

It has been a pleasure to work on this committee during the past fifteen years. At no time was any man appointed to the committee who did not serve with what he considered to be absolutely the right thing to do for the physicians of Arkansas. I cannot compliment them too highly for the work which they did. I am certain that the Medical Society appreciates their service to our organization.

Future reports will be given by the new Chairman, Dr. Whittaker.

Student AMA Liaison Committee

Alfred Kahn, Jr., M.D., Chairman

The Student AMA Liaison Committee has not met during the current year. There have been no problems as of this time.

In previous years, this committee has had discussions to determine how the Arkansas Medical Society can be of help to the Student American Medical Association, and these discussions are planned for this year.

Committee on Emergency Health Services

Robert M. Bransford, M.D., Chairman

The Emergency Health Services Committee did not have a formal meeting in 1971. However, the chairman served as liaison to the State Task Force on Emergency Health Services and assisted in the planning and organization of the annual health services meeting held in Little Rock. Again this year, the meeting was highly successful and well received.

Future plans for the committee are to assist in the training programs to be given over the State for ambulance drivers; promote legislation to implement better emergency health care throughout the State and, in general, to upgrade the emergency services throughout the State.

Medical School Committee

Ross E. Fowler, M.D., Chairman

The Medical School Committee of the Arkansas Medical Society met January 26, 1972, with representatives of the Arkansas Medical Center and discussed methods to improve the Family Practice Program and to improve health care in all areas of Arkansas.

It was agreed that, for the Family Practice Program to be successful, the family practitioner would have to be trained to take care of emergencies in surgery, obstetrics, trauma and ortho-

pedics. Employment of a full time professor of surgery and one of obstetrics for the Family Practice Division was not thought feasible by the Medical Center representatives. Discussion brought out the fact that, in all probability, there would be no one year rotating internship in any hospital in Arkansas after 1974 or 1975.

With Governor Bumpers anticipating about \$400,000 being available to the Family Practice Program, it was recommended that the Family Practice Division be changed to the Family Practice Department, thus giving them equal status with other departments at the Medical Center. This was not deemed advisable at the present time, but it was thought that with one resident in Family Practice this year, five seniors planning Family Practice internships after graduation, and 15 students planning for Family Practice their senior year, that the Family Practice Division would become a Family Practice Department within one year.

Installing new beds in the Medical Center Hospital Section never opened up was discussed for family practice patients but was thought too expensive to consider at this time.

The committee offered the assistance of the Arkansas Medical Society to the Arkansas Medical Center for any recommendations that might be beneficial to Governor Bumpers in implementing a Family Practice Department in the Arkansas Medical Center or their assistance in presenting a feasible plan before the Arkansas Legislature.

No recommendation or further action came from the meeting.

State Board of Health Liaison Committee

C. Lewis Hyatt, M.D., Chairman

During the past year, the State Board of Health has met with some personnel changes. In December, Dr. John T. Herron resigned as State Health Officer after 20 years as head of the Department and 32 years as a professional in the department. His resignation was accepted with regret since he had been the leader in developing the Arkansas State Health Department into one second to none in this Nation, especially in view of the financial support which must be considered meager by standards of other states.

After the resignation of Dr. Herron was accepted by the State Board of Health, Dr. Roger Bost came before the board with a request from Governor Bumpers that Dr. John Harrel be

nominated for his appointment as Acting Director of the Health Department in order to prevent interruption of the functions of the Department of Health. Dr. Harrel was so nominated and appointed by the Governor.

Established programs for the improvement of the public's health, in general, have been continued in full force and with the desired results. Additional services have been added to the general and specialized programs for the public with gratifying results. The ecology of our country, State, and towns is changing from day to day. These complex changes are further compounded by certain social changes and the resulting demands.

The physicians of the State, along with the Arkansas Department of Health, are faced with multiple problems that have not been solved in the areas of pollution of our water, air, land, animals and human life. The wholehearted support and cooperation of every physician in the State, with respect to his immediate community and environment, is greatly needed in solving or eliminating these hazards.

The ugly spectres of drug abuse, alcoholism, venereal diseases and illegitimacy are pyramiding social problems that the entire population and all social service agencies must work together at solving or at least decreasing these drains upon our human resources.

It would be most helpful to the department if local physicians would show sincere interest in contacting members of the General Assembly with reference to budgetary matters, talking for needed legislation, and talking against poor or detrimental proposed legislation. Prior to and during legislative sessions, if contacted by a member of the Arkansas State Board of Health or the Director, Department of Health (the State Health Officer), who represents the entire medical and allied professions of the State, they should go into immediate action locally "pro" or "con" as the case might be.

Professional Services Review Organization

Charles F. Wilkins, Jr., M.D., Chairman

During the past year the Professional Services Review Organization has continued to meet at the Blue Cross-Blue Shield Building in Little Rock the fourth Wednesday of each month. Attendance at the meetings has been excellent. In keeping with the instructions from the Council of the Arkansas Medical Society, on occasion a

member of the Subcommittee of sub-specialties has been asked to meet with the organization when a case applying to his sub-specialty has been brought before the group.

During the past year, an open invitation has been extended to members of the Arkansas Congressional Delegation to meet at any time with the organization and observe its activities. Senator McClellan visited with the organization; however, the press of other commitments prevented his attending the review session. Mr. Wilbur Mills attended the August meeting of the PSRO and observed the major portion of the session. Apparently, he was very favorably impressed by the ability of physicians to handle their own peer review. There have been introduced three proposals in Congress referable to Peer Review. HR-1 and the Bennett Amendment give the Secretary of Health, Education and Welfare a carte blanche to control the Peer Review mechanism. HR-7182 provides for the establishment of Professional Standards Review Organizations by licensed practicing physicians. On November 4, 1971, at a hearing before the House Ways and Means Committee, Mr. Mills commented very favorably regarding his attendance at the Arkansas PSRO meeting in August. He stated that he felt it would be a "great service" to members of Congress to sit with Peer Review Committees of physicians and observe their work. The Ohio State Medical Association which is sponsoring HR-7182 has felt that his visit to the Arkansas PSRO has had a tremendous impact on the hearings.

In May, the Chairman of the PSRO attended the National Workshop Conference on Peer Review in Chicago. The consensus was that Peer Review is necessary and should be performed only by physicians. It is strongly felt that legislation will control the future of the Peer Review mechanism and that drastic changes should probably not be made in the present Peer Review bodies until that time. On comparing notes with other physicians from throughout the United States, the Chairman felt that Arkansas is near in the forefront with its present Peer Review mechanism.

At the January 16, 1972 meeting of the Council of the Arkansas Medical Society, the Professional Services Review Organization was instructed to serve as consultants to the HIP Committee which, at the present time, is charged with reviewing

claims of commercial insurance carriers. The mechanism to assist this committee is, at present, being set up.

Medical and Health Manpower Commission

Francis M. Henderson, M.D., and

Lee B. Parker, M.D., Co-Chairmen

During the 1971 Arkansas Legislative Session the Medical Practices Act was amended (ACT 53) to allow the utilization of physician extender personnel. Although there is presently only minor utilization of "physician assistants" in this State, a growing interest is evident. With this interest is an equally growing concern about the training responsibility and the legal implications of extender personnel.

No method of certification has yet been approved and no specific training requirements have been adopted in Arkansas. Of course, over the Nation as a whole a moratorium has been called on licensure-certification procedures. Thus, no immediate answer will be forthcoming.

Of the multiple objectives originally given to the Health Manpower Commission, several are being met under the newly formed Arkansas Health Systems Foundation. Namely, the following:

Objective No. 8. Planning of experimental clinics utilizing traditionally accepted and newly emerging manpower personnel.

Objective No. 9. Assist in developing training programs for area schools, colleges, local health manpower, clinics, doctors and private institutions. (This is presently being sought through the vehicle of Areawide Health Education Centers.)

Objective No. 10. Health Manpower survey for the State.

Arkansas Health Systems Foundation (AHSF) is a non-profit corporation funded by contract with the Health Services Mental Health Administration of the Department of Health, Education and Welfare. It is responsible for discovering and designing alternate methods of delivering and financing health delivery services. In Arkansas, the area of responsibility is the total State. The organization has been operational since July 1, 1971 but is just now becoming functional.

Since part of the prime attention of the program is to clearly define "where we presently are" in health service, an extensive review of manpower, training programs, existing facilities and services is being accrued. Because of a

multiplicity of such studies (i.e., six major manpower studies in the past three or four years), an effort is being made to establish a State Health Statistics Center where such data may not only be aggregated and stored for retrieval, but may also be analyzed to produce medical information—a product not presently available to any significant degree in Arkansas. AHSF is also making an effort to assist in the establishment of a Pediatric Nurse Practitioner Program, encouraging and assisting the efforts of local groups attempting to establish HMO's, and areawide health education centers.

AHSF is attempting to give Arkansas physicians an opportunity to design their own future medical practice built upon the needs of Arkansas citizens.

The Health Manpower Commission has been given the responsibility of assisting the State Medical Board in designing educational guidelines and certification mechanisms for physician assistants. In accordance with this request, the Manpower Commission is presently reviewing with the Medical Board the perimeters of such involvement.

Hospital-Insurance-Physician Committee

Guy R. Farris, M.D., Chairman

The H. I. P. Committee met in regular quarterly meetings in Little Rock, Arkansas. The attendance of the professional segment was rather disappointing, usually only one or two physicians, other than the chairman, were present at these scheduled meetings.

The professional segment of the committee has noted an increase in requests from various commercial insurance companies, to adjudicate charges made to their companies by physician members of the Arkansas State Medical Society. The physician segment of the committee is being asked to determine the usual and customary charges of these physicians since many commercial companies have provisions of usual and customary payments for services rendered in the contracts.

We, of the medical segment, believe that these determinations are beyond the scope and function of this committee. Therefore, we have requested that the services of the Professional Services Review Organization of the Arkansas Medical Society be utilized by the H. I. P. Committee to determine the usual and customary charges requested by the commercial insurance

companies as they determine usual and customary charges on Medicare and Arkansas Blue Cross-Blue Shield.

Other minor problems relating to differences between physicians, insurance companies and hospitals have been discussed in the past year and most were settled to the satisfaction of all parties.

**First Councilor District Professional
Relations Committee**

F. E. Utley, M.D., Chairman

As of this date, I have no complaints from my department as chairman of First Councilor District Professional Relations Committee. This covers the period from April 1971.

**Fourth Councilor District Professional
Relations Committee**

S. C. Monroe, M.D., Chairman

It has not been necessary for this committee to meet during the past year. We have not received any information on specific cases that necessitated our consideration.

**Fifth Councilor District Professional
Relations Committee**

J. B. Wharton, Jr., M.D., Chairman

The Professional Relations Committee of the Fifth Councilor District of the Arkansas Medical Society had four complaints submitted to it in the calendar year of 1971, three of which concerned fees and one which concerned moral ethics. All of these cases were heard fully by both the plaintiffs and defendants and each case was settled locally to the satisfaction of all parties concerned.

It would appear to this committee that the number of complaints concerning the fees of certain physicians and surgeons in this district indicate that they are being questioned more and more by the patients and I am sure this will continue unless adjustments are made by these particular physicians and surgeons concerning their fees.

**Sixth Councilor District Professional
Relations Committee**

Paul Hughes, M.D., Chairman

There have been no cases for review or need for activity in the Sixth Councilor District of the Professional Relations Committee of the Arkansas Medical Society during the past year.

**Seventh Councilor District Professional
Relations Committee**

C. F. Peters, M.D., Chairman

The Seventh Councilor District Professional Relations Committee has had no cases come before it this year.

**Eighth Councilor District Professional
Relations Committee**

Richard M. Logue, M.D., Chairman

The matters which have come before the Professional Relations Committee have been resolved without complication. It is gratifying to report that there have been few matters for this committee to consider, which speaks well for the rapport of the Medical Society members with the public and with each other.

**Ninth Councilor District Professional
Relations Committee**

Ross Fowler, M.D., Chairman

The Ninth Councilor District Professional Relations Committee has no grievances to report this year.

Report of the Council

C. C. Long, M.D., Chairman

The Council of the Arkansas Medical Society met on Sunday, August 8, 1971, and transacted the following business:

- I. Authorized travel expenses for: Dr. Betty Lowe to attend a Conference on Physicians and Schools in Chicago; Dr. Ben Saltzman and Dr. Kenneth Duzan to attend an AMA regional conference on Relationships Between State Medical Associations and Voluntary Health Agencies to be co-sponsored by the Arkansas Medical Society and the AMA; and for a representative to attend AMA's annual conference of state mental health representatives.
- II. Voted to reimburse the chairman of the 1971 scientific exhibits committee for the \$75 anonymous donation made by him for exhibit awards.
- III. Decided to advise all future exhibit chairmen that the Society would provide plaques or certificates in lieu of cash awards for the outstanding scientific exhibits.
- IV. Voted to authorize a listing in the program for the 1971 convention of the

American Association of Medical Assistants at an expenditure of \$25.

- V. Selected L. A. Whittaker of Fort Smith, J. W. Ledbetter of Jonesboro and James T. Rhyne of Pine Bluff as nominees for the chairmanship of the Arkansas State Advisory Committee to the Selective Service System.
- VI. Directed that a resolution of appreciation be forwarded to Dr. Teasley in recognition of his service as chairman of the State Advisory Committee.
- VII. Voted to cooperate with the Arkansas Hospital Association on a workshop on the new standards of the Joint Commission on Accreditation of Hospitals and to pay the registration fee of Dr. Raymond Irwin as a Society delegate to the workshop.
- VIII. Asked the physician members of the Health and Medical Manpower Commission to work with the Arkansas State Medical Board on developing guidelines and certification procedures for physician's assistants.
- IX. Voted to approve entering negotiations with the American Medical Association and CNA Insurance Company for malpractice liability insurance and selected Rather, Beyer and Harper of Little Rock as the State administrator for the proposed plan.
- X. Authorized the Executive Committee to take whatever action it deemed appropriate with regard to hearings promoting national health insurance which it was rumored might be held in Little Rock in September of 1971.
- XI. Decided to take no action on a proposal of the Vanguard Travel Agency for group travel.
- XII. Nominated Dr. Elvin Shuffield to fill the unexpired term of Dr. William Snodgrass on the State Medical Board. Dr. Snodgrass retired because of health.

The Council met on September 19, 1971, and transacted the following business:

- I. Adopted a Memorial Resolution on Dr. W. R. Brooksher, deceased.
- II. Elected Dr. C. C. Long to fill the vacancy created on the Budget Committee by Dr.

Brooksher's death.

- III. Elected Dr. Robert Watson as a Society representative on the Executive Committee of the Arkansas Regional Medical Program.
- IV. Upon being advised of an increase in the premium rates for the Society's Blue Cross-Blue Shield Health Insurance Plan, directed the Insurance Committee to investigate alternate plans.
- V. Designated the Committee on Public Health to work with the AMA Committee on Health Care of the Poor.
- VI. Approved the plans of the Society's Committee on Medicine and Religion for a statewide symposium proposed for September 1972.
- VII. Voted to request the State Medical Board to work with the Attorney General in solving problems pertaining to the licensing of osteopaths.
- VIII. Moved to support the Medical Board in its desire to retain Mr. Warren as legal counsel for the board.
- IX. Decided to appoint a committee to investigate the feasibility of hiring a public relations firm.

The Council met on January 9, 1972.

A moment of silence was observed in memory of Dr. Wayne Lazenby, councilor from the fourth district.

The following business was transacted:

- I. Approved scheduling of the 1973 Annual Session for April 1-4 at the Arlington Hotel in Hot Springs.
- II. Designated the Medical School Committee headed by Dr. Ross Fowler to serve as liaison with James L. Dennis, University Vice President for Health Sciences.
- III. Directed that a letter of commendation be written to Dr. John Herron for his many years of service with the Public Health Department.
- IV. Appointed Dr. Raymond Irwin as the Society's representative on the Board for the Arkansas Health Systems Foundation.
- V. Elected Dr. Payton Kolb as alternate representative to the Arkansas Health Systems Foundation.
- VI. Endorsed the nomination of Mrs. Jeanette Rockefeller for the "Citation of a

Layman" award of the AMA.

- VII. Appointed Dr. E. Stewart Allen of Little Rock for the position on the Board of the Arkansas Family Planning Council.
- VIII. Appointed to the Second Councilor District Professional Relations Committee: Dr. C. W. Jackson, Judsonia (chairman); Dr. James Lytle, Batesville; and Dr. Charles F. Wells, Morrilton.
- IX. Agreed to underwrite the expense of the Monday night party during the 1972 meeting up to \$2,000 in the event that the dinner party fails to produce sufficient revenue to cover the cost of the entertainment.
- X. Voted to endorse H.R. 7182 for the establishment of Professional Standards Review Organizations under Medicare and Medicaid.
- XI. Requested the Society's Professional Services Review Organization to consult with the Hospital-Insurance-Physician Committee as needed and to give it whatever assistance is available.
- XII. Authorized expenses for the chairman of the Medicine and Religion Committee to attend a conference in Chicago in February.
- XIII. Heard the committee to study the advisability of hiring a public relations firm report. The committee reported on its study and recommended that the Society not employ a public relations firm. The Council voted to commend the committee for the thoroughness and excellence of its report.
- XIV. Heard Dr. James C. Bethel, chairman of the committee to study reorganization of the Society as requested by the Union County Medical Society. The Council approved the committee report and directed that it be referred to the proper committees of the Society for consideration. The report will be considered by a reference committee of the House as part of the Council report. See page 322 of this issue of the Journal for the committee report.
- XV. Heard the report of Dr. Harry Hayes, chairman of the Insurance Committee, on negotiations with AMA and CNA for malpractice liability insurance. Dr.

Hayes also reported that he had been unable to learn of any alternative plans which would be cheaper for group health insurance for the members of the Arkansas Medical Society than the current Blue Cross-Blue Shield program.

- XVI. The Council discussed for over an hour a listing of twenty-one questions concerning ethics, peer review, and so forth, submitted by the Union County Medical Society. The Council approved answers to the questions. The questions and answers will be considered by a reference committee of the House as part of the Council report. See page 316 of this issue of the Journal for the listing of questions and answers.
- XVII. The Council voted to appoint a committee to use whatever method they feel desirable to investigate the advisability of the Arkansas Medical Society establishing a foundation for the purpose of conducting peer review or for other purposes.
- XVIII. The Council decided to approve Society participation in the group travel program of International Travel Advisors, Inc., and requested a representative to attend its next meeting to go over details.
- XIX. Elected Dr. John Pelham Burge of Lake Village to fill the unexpired term of Dr. Lazenby as councilor for the fourth district.
- XX. Directed that a letter of commendation be sent to Dr. F. H. Roy, Sr., at the University of Arkansas Medical Center who was named one of the National Junior Chamber of Commerce's "Ten Outstanding Young Men of America".
- XXI. Voted to authorize expenses for Dr. Chudy and Dr. Wilkins to attend a regional conference for speakers and vice speakers of the house of delegates of state medical societies.

The Council met on February 6, 1972, and transacted the following business:

- I. Agreed to sponsor a group travel plan of International Travel Advisors for a trip to Tokyo and Hong Kong sometime during the summer of 1972. Exact dates to be worked out with the company.
- II. Authorized travel expenses for repre-

sentative to attend an AMA Conference on Health Care of the Poor in McAllen, Texas.

- III. Heard reports on progress of negotiations with AMA and Continental North American Insurance Company for the group malpractice plan sponsored by the American Medical Association.
- IV. Decided to continue the present Blue Cross-Blue Shield Health Insurance Plan for members of the Society.
- V. Moved to write the Congressional delegation and the Food and Drug Administration protesting recent actions prohibiting the use of commonly used prescription and non-prescription drugs.
- VII. Endorsed the program of the Arkansas Chapter of the Student American Medical Association to obtain jobs for medical students in physicians' offices, hospitals, and so forth, during the summer.
- VIII. Urged members to contact their legislators to support State appropriations for the Medical Student Loan Fund and for the proposed establishment of a Department of Family Practice at the Medical Center.
- IX. Allocated \$100 for the expense of a meeting on Medicine and Religion.
- X. Approved the report of the committee to study the reorganization of the Medical Society headed by Dr. Bethel. The report was also referred to a reference committee to allow full discussion by members of the House and it will be reported on at the meeting on Wednesday. The Council voted to table one recommendation of the report. That recommendation was that the House of Delegates discuss limiting offices in the Medical Society to those members in the private practice of medicine and creating a special membership classification for salaried physicians.
- XI. Voted to ask the Society's Health Manpower Commission to assist the newly-formed Health Careers Council in its efforts to enlist more people to work in the health field.
- XII. Referred to the Committee on Constitution and By-Laws without recommendation the suggestion by Dr. Joseph Norton

that each councilor district elect a medical student to the Council of the Arkansas Medical Society and its House of Delegates with full privileges to vote, speak and serve on committees.

- XIII. Voted to cooperate with the Regional Medical Program to hold a two-day conference on standards and measurement of quality medical care.
- XIV. Received for information a resolution by the Greene-Clay County Medical Society urging that a requirement be established that all physicians engage in family practice for two years before becoming eligible for residency training in one of the specialties.
- XV. Adopted the recommendations of the Budget Committee and the budget as presented in the March issue of the Journal of the Arkansas Medical Society.
- XVI. Voted to pay one-half of the expenses for five representatives to attend the AMA-AMPAC Public Affairs Workshop in Washington, D. C.
- XVII. Reviewed the results of an investigation by the headquarters office on the feasibility of publishing a pictorial membership directory. Because of anticipated problems in obtaining photographs of the members, as well as the cost and the likelihood of losing money on such a directory, the Council voted to recommend to the House of Delegates that it disapprove the proposal.
- XVIII. Took cognizance of the organization of an Arkansas committee to promote the passage of a Kennedy-type National Health Insurance plan. It was decided not to take any action which might attract public attention to the committee but to ask the councilors to urge their county societies to oppose the activities of the committee.
- XIX. Because of philosophical objections to accepting government money, decided against applying for a grant from the National Center for Health Sciences Research and Development to conduct an Experimental Medical Care Review Organization.

Report of the Executive Vice President

Mr. Paul C. Schaefer

The Executive Vice President's report this time last year said:

"The role of organized medicine becomes increasingly important with each passing month—and proportionately more difficult.

The many government health programs generate a veritable shower of health proposals, grant possibilities, conferences, hopes and alarms. The interest, even the survival, of the private practice of medicine dictates that medical organization must respond to every stimulus with vigor, intelligence and cold-blooded objectivity. Medicine has, and must continue, to give leadership to every conception of health care even though we know that most will be stillborn.

Such participation requires the sacrifice of time and energy on the part of the members of the Society and increasing expense on the part of the organization."

The most important, most time consuming, most frustrating and increasingly expensive part of medical organization's work is trying to stay abreast of developments of proliferating government "health" programs. Millions of dollars of Federal money is available for grants to organizations existing in the State, or to be formed for the purpose of obtaining a grant. Each new organization calls for another representative on a board or commission; each new organization requires more travel by committee members and headquarters personnel to meetings outside of Arkansas, as well as in the State.

In a time when it seems that everyone and every organization in the State is receiving Federal money, medical organization, instead of receiving federal grants, is being subjected to more taxes for which it was never held liable before. In addition to "non-related income" taxes which were instituted three years ago, State law now requires us to pay, for the first time, Workmen's Compensation tax. That tax amounts to over \$750 this year.

The net effect of new outside demands on the Medical Society budget, new taxes and inflation, is to restrict the traditional services of the Society to its members, to stifle planning for improvements in Society operations and to preclude additions to Society undertakings.

Budget Committee

H. W. Thomas, M.D., Chairman

The Budget Committee submitted the following budget for 1972. It has been approved by the Council.

INCOME		
Budget Item		1972 Budget
Membership Dues		\$115,000.00
Journal Advertising		
Local	\$ 5,500.00	
National	23,500.00	29,000.00
Booth Income		7,100.00
Annual Session Income		2,000.00
AMA Reimbursement		1,200.00
Miscellaneous & Rosters		650.00
Interest on Government Securities		10,000.00
Retirement (Employee contribution)		425.00
Specialty Desk		650.00

		\$166,025.00

EXPENSES		
Salaries		
Society	\$ 48,783.00	
Public Relations	10,000	
Journal	8,558.00	
Exhibits	210.00	\$ 67,551.00
Travel & Convention		
Society	12,800.00	
Public Relations	3,000.00	
Journal	200.00	16,000.00
Taxes		
Society	2,492.00	
Journal	560.00	
Exhibits	753.00	3,805.00
Retirement		
Society	11,464.00	
Journal	2,024.00	13,488.00
Stationery & Printing		
Society	1,200.00	
Public Relations	50.00	
Journal	100.00	
Exhibit	50.00	1,400.00
Office Supplies & Expense		
Society	3,390.00	
Public Relations	50.00	
Journal	610.00	4,050.00
Telephone & Telegraph		
Society	1,925.00	
Public Relations	750.00	
Journal	200.00	
Exhibit	25.00	2,900.00

Rent		
Society	5,100.00	
Journal	900.00	6,000.00
Postage		
Society	3,160.00	
Public Relations	100.00	
Journal	1,200.00	
Exhibit	40.00	4,500.00
Insurance & Bonds		
Society	2,750.00	
Journal	650.00	3,400.00
Auditing		
Society	467.00	
Journal	83.00	550.00
Council Expense		800.00
Journal Printing		23,500.00
Annual Session		
Society	9,500.00	
Exhibit	1,900.00	11,400.00
Winter Meeting		1,600.00
Senior Medical Day		1,500.00
Dues & Subscriptions		
Society	2,570.00	
Journal	230.00	2,800.00
Gifts & Contributions		
Society	1,225.00	
Journal	25.00	1,250.00
Woman's Auxiliary		1,200.00
Legal Services		
Society	3,570.00	
Journal	630.00	4,200.00
Special Committee		
Society	285.00	
Public Relations	15.00	300.00
Rural Health		500.00
Miscellaneous		
Society	10.00	
Public Relations	10.00	
Journal	5.00	25.00
Freight & Express		
Society	10.00	
Public Relations	10.00	
Journal	5.00	25.00
Office Equipment		
Society	750.00	
Journal		750.00
Specialty Desk		80.00

Expenses		\$173,574.00
Income		166,025.00

Deficit		\$ 7,449.00

Report of AMA Meeting
November 28-December 1, 1971
New Orleans, Louisiana
Purcell Smith, Jr., M.D., Delegate

This report is a summary of the more significant actions of the House of Delegates at the November 1971 Clinical Convention. The House acted on two special reports, twenty reports from the Board of Trustees, sixteen reports from various councils, and seventy-two resolutions.

(1) Several items of business pertained to medical students; the House adopted a resolution "creating a special section for medical students and a section for interns and residents."

(2) AMA President Wesley Hall addressed the House of Delegates and again called for a constitutional convention or other appropriate procedure for a basic review of organizational structure in programs. He indicated that his concern called for immediate action rather than long range planning. President Hall was disturbed by loss of membership of the AMA, Association Finances, and decrease in attendance at meetings. He called for employment of the consulting firm of Cresap, McCormick and Paget which did a study for the AMA in 1968. He also recommended a review of AMA programs, suggesting that some have outlived their usefulness and that some should be pruned. President Hall's address was discussed in Reference Committee; it was the feeling of the Reference Committee that a constitutional convention was not necessary at this time since changes in constitution and bylaws can be carried out in the present mechanism. The Reference Committee felt that the Council on Long Range Planning and Development was an appropriate mechanism for reviewing the structure in programs. The House accepted the Reference Committee's recommendations to refer Dr. Hall's remarks to the Council on Long Range Planning and Development but it also approved an amendment which instructed the Council on Long Range Planning and Development to hold open hearings for the membership in San Francisco in June 1972 and Cincinnati in November 1972, and provide the House with progress reports.

(3) The Vice President of the AMA was given voting privileges on the Board of Trustees; he had previously been a nonvoting member.

(4) The bylaws were amended to permit physicians who are not members of the AMA to

participate in AMA scientific programs as "invited guests."

(5) The House established annual dues of \$20 for interns and residents as members of the AMA; this amount was calculated to cover some of the costs of the benefits of membership, such as receiving AMA publications. The \$20 annual dues for interns and residents will apply whether membership is obtained through a state association, or by direct application to the AMA.

(6) Several actions were taken in regard to physician's assistants. The House directed that the AMA "assume a leadership role in developing and sponsoring a national program for certification of the assistants of the primary care physician, and also adopted a report of the Council on Medical Education outlining essential requirements for AMA approval of educational programs for such assistance. The Board of Trustees is to develop the guidelines on compensation of physicians on services of their assistants, and to report back to the House next June.

(7) Concern over the rising cost of hospital care was evident and the House passed a resolution supporting a study to be conducted in consultation with the American Hospital Association, private and government payment agencies, and representatives of the public. The study will concern factors involved in present hospital costs, and possible means of lowering those costs.

(8) A revised statement on the scope, objectives, and functions of occupational health programs also was adopted by the House. The statement, among other things, said, "Some employees, on occasion, may find it impossible to locate or to obtain the services of a personal physician or health service. In such circumstances, the occupational physician may undertake additional and continuing treatment of an employees non-occupational condition if requested to do so by the employee or his family."

Dr. Milton Helpert, Chief Medical Examiner for New York City, was chosen to receive the AMA Distinguished Service Award for 1972. Mr. Mac F. Cahal, Executive Director of the American Academy of Family Practice for nearly twenty-five years, received the Layman's Citation for Distinguished Service.

Report of the Arkansas State Medical Board January 1, 1971-January 1, 1972 Joe Verser, M.D., Secretary

The Secretary of the Arkansas State Medical Board makes the following report of the activities of this Board since the last meeting of the Arkansas Medical Society:

The officers and members are as follows:

Hugh R. Edwards, M.D., President
Ross Fowler, M.D., Vice-President
Joe Verser, M.D., Secretary-Treasurer
Frank M. Burton, M.D.
Earle D. McKelvey, M.D.
John F. Guenther, M.D.
George F. Wynne, M.D.
C. Stanley Applegate, Jr., M.D.
H. Elvin Shuffield, M.D.
Eugene R. Warren, Legal Investigator

The 1971 General Assembly enacted legislation whereby the Arkansas Osteopathic Board was to be abolished and all osteopaths licensed by that board to be given a license by the State Medical Board to practice medicine and surgery. To this date, twenty-five osteopaths have been licensed under the Grandfather Act. One osteopath has made application for license by reciprocity. This application will be presented to the board for approval at its next meeting date.

The 1971 General Assembly authorized the State Medical Board to license by examination graduates of foreign medical schools who have had a year's internship in a hospital in the United States affiliated with the Medical School. As of this date, seven graduates of foreign medical schools have been licensed by examination.

A yearly financial report of the board's activities, prepared by Johnston, Freeman & Company, Certified Public Accountants, was sent to and approved by the Council of the Arkansas Medical Society.

The board investigated every case of violation of the Medical Practices Act reported to the Secretary during the year. Following is a summary of the board's proceedings.

Physicians registered for 1971:

Resident	1,830
Non-Resident	1,397
Physicians licensed by examination	109
Physicians licensed by reciprocity	28
Physicians certified to other states	117

Licenses revoked for non-payment of annual registration fee	24
Licenses suspended for non-payment of annual registration fee	36
Licenses suspended for violation of Medical Practices Act	1
Cases pending for violation of Medical Practices Act	3
Injunctions issued	1

**ARKANSAS STATE MEDICAL BOARD
BALANCE SHEET
June 30, 1971**

ASSETS			
Cash in banks			
Bank of Weiner, Weiner, Arkansas			
Certificate of Deposit #362	\$ 8,553.71		
Certificate of Deposit #392	2,746.35	\$11,300.06	
Bank of Harrisburg, Arkansas			
Checking Account	\$22,294.41		
Certificate of Deposit #519	12,999.70	35,294.11	
Office equipment		3,187.27	
TOTAL ASSETS		<u>\$49,781.41</u>	
LIABILITIES AND SURPLUS			
LIABILITIES			
Withholding and FICA taxes deducted and unpaid for the quarter ended June 30, 1971			
	\$	266.40	
SURPLUS			
Balance at beginning of year	\$47,157.36		
Add: Excess of receipts over disbursements for year ended June 30, 1971 (Schedule 2)	\$ 669.76		
Fixed assets included in disbursements	1,708.70		
Less: Increase in payroll taxes withheld but not remitted at June 30, 1971	(20.78)	2,357.68	49,515.04
TOTAL LIABILITIES AND SURPLUS		<u>\$49,781.41</u>	
Other office equipment fully depreciated		\$ 2,200.00	

**Summary of Arkansas State Department of
Health Activities**

J. A. Harrel, Jr., M.D., Director of Health

Bureau of Laboratories

Thirteen laboratories comprise the operating units of the Bureau.

Almost all of the laboratories showed an increase in the number of specimens received and/or tests performed. Utilization of laboratory services and complexities of tests offered are increasing continually.

Two new laboratories were certified and 13 on-site inspections were given.

The Laboratory Improvement Program, designed to assist in standardization and improve-

ment of clinical laboratory services, increased its participation to 110 hospital, clinical and independent laboratories.

The Bureau participated in proficiency testing surveys for Microbiology, Clinical Chemistry, Hematology, Serology, Milk and Food Bacteriology.

Division of Radiological Health and Chemistry

Fiscal year 1971 included licensing and regulation activities in the area of ionizing radiation. Inspections performed on X-ray equipment and medical licenses totaled 2,157. Non-ionizing radiation surveys amounted to 1,164.

The Calibration and Maintenance Laboratory repaired and/or calibrated 14,971 survey instruments.

Conducted in the Chemistry Laboratory were 19,686 tests on 3,310 samples of food, drug, water, meat and meat by-products, radiation samples and blood (for blood alcohol).

Division of Milk and Dairy Products

Services include surveillance programs to protect milk and dairy products from adulteration and misbranding, from false advertising during production, processing, distribution and storage.

Licenses were issued to 968 Arkansas pasteurization plants, manufacturing milk plants and soft ice milk establishments and to 53 out-of-state plants.

Surveys are made once a year of all single service milk container fabricating plants for listing as approved sources in the Interstate Milk Shippers Quarterly Report.

Bureau of Vital Statistics

In accordance with the Vital Statistics Act of 1965, during calendar year 1970, the Bureau recorded a total of 34,742 live births, 20,517 deaths and 656 fetal deaths.

Marriage records received from county clerks totaled 23,308. There were 9,310 divorces and annulments granted for the same period.

During 1970, there were 1,516 adoptions, 407 legitimations and 381 changes of names. Delayed and prior birth records numbered 9,460.

In an effort to improve service to the public, all 1953-1969 birth and death certificate indices were placed on microfilm. Microfilm reader equipment was purchased to handle the new record-searching system.

Division of Public Health Nursing

Thirty percent of total nursing time was spent in individual patient visits with the balance of

time occupied by clinics, school services, immunizations, health education and administrative duties.

One hundred eighty-seven public health nurses made a total of 156,711 nursing visits in the State.

Recruitment of nurses, their orientation and continuing education programs, as well as preparation of manuals for nursing procedures and policies which guide nurses also are responsibilities of nursing consultants and supervisors.

Division of Emergency Health Services

The Divisions of Safety and Health Mobilization were combined to form the Division of Emergency Health Services.

To complement updating of everyday emergency care, the Division has continued programs of disaster preparedness with the Emergency Medical Supply Program, Packaged Disaster Hospitals and Hospital Reserve Disaster Inventory.

Present emphasis in Health and Medical Services Planning is on working with Civil Defense and related agencies in communities to develop plans to determine and utilize emergency capabilities.

Division of Veterinary Public Health

The Division maintained a constant program to give all possible assistance in the area of animal diseases transmissible to man. The Arkansas Animal Morbidity Report, a monthly publication, documents information on animal diseases that occur in Arkansas.

Reported animal bites to humans reached a total of 1,243 individuals. In connection with these animal bite incidents to people, 2,981 single doses of duck embryo rabies vaccine were administered by physicians.

Control efforts included the administering of rabies vaccine by practicing veterinarians to 139,143 pet animals.

Division of Plumbing

Seventy-one persons were examined for master licenses, 123 for journeyman licenses. With licenses renewable every year, 1,208 master licenses and 1,070 journeyman licenses were issued; 594 apprentices were registered.

The Division participated in speaking engagements, educational meetings, training sessions and city visits.

Many new products and materials were tested in the Testing Laboratory.

Division of Food and Drug Control

Five hundred sixteen sanitary inspections were made on food processing plants and school cafeterias in 35 counties lacking services of a local sanitarian.

One hundred ninety-eight samples were examined for chemical or visual violation of the Food, Drug and Cosmetic Act. A total of 294,256 pounds of food was found unfit for human consumption and Division personnel supervised removal and/or destruction from channels of trade.

The number of drug samples tested by the Food and Drug Laboratory increased by 707.0 percent between 1966 and 1970.

Mr. Creo A. Jones, Director, Division of Food and Drug Control, was elected to serve as President of the Association of Food and Drug Officials of the United States.

Division of Hospitals and Nursing Homes

The following programs are administered by the Division: Construction and Modernization of Hospitals and Medical Facilities (P.L. 88-443); Construction of Community Facilities for the Mentally Retarded (P.L. 88-164); Construction of Community Mental Health Centers (P.L. 88-164). The Division, under contract with the Social Security Administration and the Department of Social and Rehabilitative Services, certifies all hospitals, skilled care nursing homes, home health agencies, independent laboratories, extended and intermediate care facilities. It also licenses hospitals, nursing homes and nursing home administrators.

The Child Study Center of Greater Little Rock was completed and is operational. The George W. Jackson Community Mental Health Center, part of the Northeast Arkansas Services Center complex, also is complete and expected to begin operation in the near future. An addition to the North Hills School for Exceptional Children, North Little Rock, was begun and finished during 1971. Three new facilities are in the planning stages.

Under the Medicare Program, 63 hospitals, 32 extended care facilities, 77 home health agencies and 14 independent laboratories were re-surveyed to certify to the Social Security Administration that they were in substantial compliance to continue participation in the Health Insurance Program.

The Program for Licensure of Hospitals, Nurs-

ing Homes and Related Facilities resulted in licensure of 206 nursing homes with a total of 14,168 beds; 104 general hospitals with a total of 8,540 beds. Act 258 of 1971 amended the Hospital Licensure Law to include a new category of license, "Recuperation Center." One facility was licensed in this category; 19 other type facilities including infirmaries, rehabilitation facilities, orthopedic rehabilitation centers and psychiatric and tuberculosis hospitals were licensed.

Under the Licensure Program, 1,587 inspections were made on the previously mentioned facilities.

Services related to Act 122, 1967 (Architectural Barriers Law) consisted of review and approval of plans and specifications for 58 construction projects. One hundred thirty-six on-site inspections were made on these projects.

Bureau of Dental Health

In the educational phase, consultative services were given to 29 agencies and municipalities relative to dental programs, fluoridation of water supplies and establishment of dental facilities for State and Federal Programs.

One hundred nineteen communities are fluoridating their water supplies. State coverage with this preventive procedure is nearing 75 percent.

Twenty-one part-time dentists gave dental care to 1,971 families classed as indigent but not eligible for State or Federal Dental Programs.

Bureau of Environmental Engineering

Between 1970 and 1971 the number of public plans processed rose from 598 to 818. Twenty-one water systems, two water treatment plants, five sewer systems, and eight sewage treatment plants began operation.

The Bureau conducted 110 courses throughout the State to serve 747 waterworks operators and 350 waste water operators.

All water serving interstate and intrastate food processing plants and transportation facilities must be certified. This segment of activity serves red meat plants, as well as poultry and canning plants.

Home building by Federal agencies now requires review of water and sewer systems by the Bureau.

Special studies were initiated in cooperation with other State and Federal agencies to ascertain the true chemical quality of various streams for arsenic, lead and other heavy metals. These studies will terminate in a joint report in 1972.

Division of Public Health Education

The Division continued its efforts to make more readily available an uninterrupted flow of information related to basic public health services and essential services in needy areas.

Services provided by Division personnel include the following: preparation of journal articles and news releases; purchase, review, distribution and servicing of films for Department use; production, selection and distribution of health pamphlets and related materials; securing, distributing and maintaining audio-visual aids and exhibits for Department personnel to use in their programs; responsibility for a limited health resources library.

Bureau of Local Health Service

The Bureau is responsible for directing, coordinating and evaluating all programs, multi-services and functions of the Divisions and Bureaus of the Department as well as those of district, city and local Health Departments in the 75 counties of the State.

The Director of the Bureau of Local Health Service also is Assistant State Health Officer. He meets with advisory groups, committees, councils and boards to assist in formulating and defining new concepts and methods for improvement of established programs and services and to innovate acceptable methods and means of establishing and administering new programs and services.

The Personnel Section of Central Administration coordinates personnel records with the State Merit System and Division of Administration and Finance. The State Department of Health is currently using 183 classification categories under specifications of the 1969 Classification and Compensation Plan.

Division of Communicable Diseases

Activities included tuberculosis, immunization, venereal disease and other Communicable Disease Programs which were directed to protection of the individual and community.

Vaccination against smallpox has been eliminated as a requirement for entering school. Immunization programs on a mass scale are offered through local Health Departments to communities in the State for protection against rubella (German measles) and rubeola (red measles).

Tuberculosis continues to decline slowly as the influence of effective drugs and modern treatment becomes stronger.

Venereal diseases are experiencing new life. Gonorrhea is estimated to be infecting one teenager in 143 between 15 and 19 years of age in Arkansas.

Food vector and water-borne diseases pose a different sort of threat. Rapid identification and prompt reporting are essential.

To provide protection, the Division offers consultation and epidemiological investigation of potential and real epidemic situations and maintains records for reportable infectious diseases.

Division of Maternal and Child Health

The Division placed utmost emphasis on care of the mother not only during the prenatal period, but also during the conceptional years. Teaching health care during the mother's conceptional years is emphasized in public meetings such as P.T.A. groups, various volunteer associations and organizations.

A strong interest in family planning increased the number of family planning clinics. This program has produced multiple benefits for the family. It is the first opportunity for the poverty mother to plan her family size; infant morbidity and mortality have improved; the family structure has become stronger and the children already present have an improved family relationship.

The special project in Jefferson County is designed to discharge a premature baby earlier than the usual discharge date in order to give the family the full benefit of the family-child relationship during the formative years of a child's life. A decrease in hospitalization costs is a secondary benefit of the program.

The Child Development Clinic for mentally retarded children and the Hearing and Speech Clinic have been combined into a Handicapped Children's Center. Medical, social, psychological, dental, speech, vision and audiology evaluations are part of the comprehensive program.

Nutritional services were available on a regular basis in 38 of the 75 counties of Arkansas. At least 50 counties received assistance through clinics, diet sheets or manuals. Direct services include clinic and home visits to patients receiving other Health Department services, or referred by physicians in private practice for consultation on modified diet; group teaching in formal and informal classes.

Ten counties (Pulaski, Jefferson, Lonoke, Grant, Garland, Perry, Saline, Conway, Arkansas,

and Hot Spring) have been designated for comprehensive care of the poverty level mother and child who have high risk problems of delivery or infant morbidity and mortality. Optimum prenatal, delivery, post-partum and infant care are given. Nutrition, public health nursing care and health education are components of the comprehensive services given families.

Division of Meat Inspection

Arkansas' Meat Inspection Program received formal certification as "equal to" the Federal Meat Inspection Program by November 24, 1970. Arkansas was the tenth State to achieve this status. Thirty lay inspectors and three veterinary supervisors were additional staff.

The Federal Wholesome Meat Act of 1967 necessitated changes in the Arkansas State Meat Inspection Regulations and the Rules and Regulations Pertaining to the Meat and Meat Products Inspection Act, Act 370 of 1967. Both were revised in early 1971.

In May of 1971, a formal agreement was signed to integrate State and Federal enforcement efforts for further Federal-State cooperation in the field of meat inspection. Under the agreement, information on suspected violations and records will be shared by State and Federal officials to prevent unwholesome, adulterated or improperly labeled meats from being sold as human food.

Under provisions of the bill passed by the State Legislature, Arkansas State inspectors are authorized to verify, or certify, that meat products received by State-administered institutions complied with requirements outlined in procurement instruments.

There are 93 plants under full-time Arkansas inspection. Forty-nine custom exempt plants under sanitation surveillance are enrolled in the Meat Inspection Program.

Division of Chronic Disease Control

An inexpensive exercise machine which can be set up in the patient's home for use twice daily has been developed by the physical therapist.

Screening patients who are at high risk for diabetes is one of the control programs. Dextrostix, the primary screening method, is followed, if indicated, by a post-prandial blood sugar. High risk patients receive annual re-screening for diabetes.

Practicing physicians use a convenient mailing

kit for processing of throat swab specimens through the Bureau of Laboratories. Findings are reported to the physician and proper treatment ensues.

Act 38 of 1971 abolished the Arkansas State Cancer Commission, making it the Cancer Section, Division of Chronic Disease Control.

The Cancer Section works with cancer registries in nine hospitals, the State Cancer Registry, nurse's workshops, annual cancer seminars and tumor clinics in six general hospitals.

Report from the School of Medicine

Winston K. Shorey, M.D., Dean

This annual report from the University of Arkansas School of Medicine is devoted to the productivity of the Medical School in terms of graduates with the M.D. degree over the ten year period 1961-62 through 1970-71. There were 74 graduates in June 1962 and in June 1971 there were 104, a forty percent increase. This increase can be attributed to: 1) a 15 percent increase in the number of students admitted, and 2) decrease in attrition (students lost after admission) from 22.0 percent to 8.0 percent.

Sufficient time has not elapsed for the anticipated impact of this increase in physician production to be felt throughout the State in terms of the number in practice. During the past ten years, 838 M.D.'s have graduated from the University of Arkansas School of Medicine; and of these, 270 or 32 percent are established in practice. Following graduation it takes seven years for the majority of the members of a graduating class to settle in practice. This long period results from: 1) the additional training that a physician pursues following graduation from medical school, and 2) a majority of young physicians are obligated for service in the armed forces.

Of the 270 M.D. graduates of the past ten years who have established practices, 174 or 64 percent have settled within the State of Arkansas, and they are to be found in forty-nine of the seventy-five counties of Arkansas.

The 838 M.D. graduates of the past ten years were the product of 984 first year admissions. Seventy-three of Arkansas' seventy-five counties were represented among these admitted students.

There are 580 of the 838 M.D.'s who have graduated during the past ten years who can be identified in a specific field of medicine. Identification of an individual graduate is made by his either having established a practice or en-

tered a specific training program. Of the other 258, no information is available regarding 9, 5 are deceased, and 244 are in training programs or military service without specific specialty differentiation. The following table presents the fields of medicine in which the 580 graduates, whose specialty area can be identified, are engaged.

Activities of 580 M.D. Graduates

Medical Field	Number	Per Cent of Total
Anesthesiology	20	3.4
Bioengineering	1	0.2
Dermatology	11	1.9
Emergency Medicine	4	0.7
General or Family Practice	139	23.9
Internal Medicine	93	16.0
Neurology	3	0.5
Obstetrics & Gynecology	36	6.2
Ophthalmology	25	4.3
Otolaryngology	12	2.1
Pathology	31	5.3
Pediatrics	42	7.2
Psychiatry	29	5.1
Public Health	2	0.4
Radiology	42	7.2
Surgery	51	8.8
Surgery, Neurological	8	1.4
Surgery, Orthopedic	22	3.8
Surgery, Plastic	2	0.4
Urology	7	1.2
	580	100.0%

In the fall of 1972, an additional eleven students will be admitted to the first year class of the School of Medicine, bringing the first year enrollment to 121. At this rate of admissions, 1,210 first year students will be admitted during the next ten years. Assuming that our current attrition rate of 8.0 percent is not exceeded, there will be a minimum of 1,114 M.D. graduates from this School of Medicine during the next decade. This is a 33 percent increase over the past ten years.

Report of the Arkansas Regional Medical Program

Robert Watson, M.D.

Member of Regional Advisory Group

This report is presented by the most recently appointed member to the Regional Advisory Group of the Arkansas Regional Medical Program. Presently, he is likely the least informed member for, as yet, he has not attended a meet-

ing, and any opinion and any information regarding the Arkansas Regional Medical Program is gained from articles in the press, the Journal of the Arkansas State Medical Society, and other sources of public information available to all of us.

In review, we might say that this present program has developed from the initial planning initiated during the administration of President Lyndon Johnson. Early planning called for the establishment of innumerable treatment centers throughout the United States directed specifically to cancer, heart disease, and stroke. Later was added the term "and allied conditions." This initially was sponsored by the National Institute of Health.

Then, in 1968, under the funding of the Health, Education and Welfare Department, numerous regional medical programs became established over the country directed more toward a program for overall education of those providing health services and to make available to them information, techniques, and training of new personnel that would lead to the direct benefit of the patient. In substance, it seems to me that the earlier intent of establishing actual treatment centers under N.I.H. funding has now, instead, changed to the development of training centers to provide for state-wide training programs, rather than centralized units for specialized procedures in patient care.

Initially, application was available to any group of individuals or any institution dealing in medical care that might wish to become a part of this new venture funded by H.E.W. In Arkansas, such a responsibility was accepted by the Medical Center at the University of Arkansas School of Medicine. Law provided that an advisory group be set up, known as the Regional Advisory Group, that would serve in such a capacity to the Arkansas Regional Medical Program. This Regional Advisory Group possessed representation from the Arkansas Hospital Association, the Arkansas Heart Association, the Arkansas Medical Society, the Arkansas State Board of Health, Blue Cross-Blue Shield, several responsible businessmen throughout the State, hospital administrators, members from the administering and teaching staff at the University of Arkansas School of Medicine, and physicians in private practice representing various areas of the State. The original constitution provided that

the makeup of the Regional Advisory Group would consist of 51 percent of physicians in private medical practice, and that any program developed by the Regional Medical Program would not cross lines of referral of private patients. However, those who "pay the fiddler, call the tune," and, in time, by directive, the membership of the Regional Advisory Group has been changed. Presently, there are 51 members. Selection to this group has been wise, generous, and includes practically every reasonable source over the State for intelligent guidance. In all, 22 physicians serve this group, including ten representatives from the University of Arkansas Medical Center. The positions within the group definitely do lend much to the leadership of the program, and it is most commendable to see the amount of time that these men actually do dedicate to this responsibility.

The Arkansas Regional Medical Program has been very active. Leadership is in the hands of dedicated and capable individuals, and the administration has been quite careful and conscientious in considering the needs of all communities within the State, and not just the central or large areas.

The Arkansas Regional Medical Program is to be commended for the quality and for the character of numerous training programs they have instituted and funded. Particularly at the Medical Center, there has been established a continuing training program available to the physicians over the State, through which consistently sizeable groups have come to the Center to spend several days in training sessions, in which are demonstrated means and methods for these doctors themselves to become most proficient in the modern up-to-date management of problems of coronary care. This training program in coronary care has been well attended repeatedly by physicians from all parts of the State. One of the most impressive accomplishments of the Regional Medical Program has been the institution of a training program for nurses in the management of the patient in the Cardiac Intensive Care Unit. This, too, is a continuing program enrolling a class of some 20 nurses at two week intervals in this continuing training program. The comprehensive kidney program at the Medical Center has as its objective to improve the care and health status of the patient with chronic kidney disease. These

efforts are brought about through the expansion of the kidney transplant program. Special laboratory equipment has been outlined, in that for the first time donor kidneys from anywhere over the State can now be prepared for use as transplants. At the Arkansas Baptist Medical Center, a training program has been established by which the patient and the family are taught the detailed procedure for self-administered dialysis treatment in the home. These people whose life is dependent upon continuing dialysis are brought to this Center, that they themselves may learn the step-by-step procedure of this treatment, and it is a most rewarding study of character and self-discipline to see these patients performing their own vena punctures and carrying out their own treatment independently.

Three centers have been established in the northern and eastern parts of the State at Harrison, Mountain Home, and Blytheville that provide programs for training health personnel in new skills and patient-care in the individuals suffering physical and speech impairments, secondary to stroke. Jonesboro serves as the center for a training program serving clinical laboratories in nine nearby community hospitals. The objectives of this program are to establish standards and methods of performance for the betterment of the in-training program throughout the hospitals of this area.

Continued education for nursing home personnel dealing with problems of heart disease, cancer, and stroke is sponsored by the Arkansas

League for Nursing, and additional training is provided for the personnel serving the nursing needs throughout the State.

In western Arkansas, five community hospitals in the Fort Smith area have direct cardiac monitoring facilities and direct "hot line" methods of communication, connecting with the central station in Fort Smith to aid in the care and management for the acute coronary problems in each of these individual hospitals.

All who have seen the Regional Medical Program, as it deals with care provided at the patient level, are impressed with the quality and with the conscientious concern of every individual at each level throughout the administration of this training program. An annual budget of one and one-half million dollars is a very sizeable budget for any project, and as customarily prevails in any venture such as this, administrative expense, staff, maintenance, promotion and other comparable expenses are quite high.

Every physician in Arkansas must acquire a knowledgeable interest in the Arkansas Regional Medical Program, and he must make his voice and his judgment heard by this program and keep the private practitioner active in its leadership and in helping to direct the trend of the manner of services that it provides, for we all know that there is an ever increasing attempt for others to dictate the manner and the means by which we physicians are to care for our patients.

House of Delegates Business Affairs

The following Constitutional amendments and resolutions are brought to the attention of individual members and county medical societies. The items printed here represent those received in time for publication in advance of the meeting. They will be referred to reference committees. Open hearings by the reference committees are to be held on Sunday afternoon, April 23rd, immediately following the session of the House of Delegates. All members of the Society are urged to participate in the open hearings of the reference committees. The reference committees want expressions of opinion from the membership.

Constitutional Amendments

The Constitutional Revision Committee sub-

mits the following proposed Constitutional amendments in accordance with the recommendation of the House of Delegates at the 1971 Annual Session:

I. Under Chapter VIII, Section 1 (A), delete committee #14, "Committee on Continuing Education."

II. Under Chapter VIII, Section 15, delete the entire section.

(Wording of Section 15 being deleted: The Committee on Continuing Education shall consist of ten members, one from each councilor district. The Committee shall exercise leadership and responsibility in continuing review of the system of graduate medical education. It shall foster continuous efforts to

increase excellence in the system of graduate education to serve the cause of medicine and to assure the public of continuing improvement in the graduate training of physicians in practice.)

III. Under Chapter VIII, Section 6, delete the entire section and re-word it as follows:

"The Committee on Medical Education shall be responsible for consideration of all questions pertaining to medical education. It shall maintain close relations with the officials and faculty of the University of Arkansas School of Medicine, the Arkansas Academy of Family Practice, and other groups interested in maintaining and improving medical education in our State institutions. It shall foster continuous efforts to increase excellence in the system of postgraduate education to serve the cause of medicine and to assure the public of continuing improvement in the postgraduate training of physicians in practice.

"The Committee shall consist of ten members, one from each councilor district."

(Wording of Section 6 being deleted: The Committee on Medical Education shall serve this State for the Committee on Medical Education of the American Medical Association, and shall have referred to it all questions pertaining to medical education. It shall maintain close relations with the officials and faculty of the University of Arkansas School of Medicine and the Arkansas Academy of General Practice, rendering at all times such assistance as it can in maintaining that institution as a Class A Medical School.)

The following resolutions have been submitted for consideration of the House of Delegates:

RESOLUTION

Independence County Medical Society

WHEREAS, the Independence County Medical Society realizes the shortage of hospital beds in Arkansas, and

WHEREAS, the higher education fund is unable to provide the financial support to run the hospital on a charity basis,

BE IT THEREFORE RESOLVED: That the members of the Independence County Medical Society take this means to urge the Arkansas State Medical Society to propose to the Arkansas State Legislature that all of the beds in the Uni-

versity of Arkansas Medical Center be utilized to their fullest capacity, and

That the hospital be run on a charity basis based on the patient's ability to pay,

That the financial deficit occurred by the running of the hospital be paid by the General Fund rather than from the Special Education Fund.

RESOLUTION

Greene-Clay County Medical Society

WHEREAS, it is generally accepted that more family physicians are needed, and

WHEREAS, by the time a student graduates from medical school he has, in most cases, because of the pressure of his curricular activities, narrowed his interest in medicine to that of a particular field, and

WHEREAS, at that point he often makes, without the benefit of actual experience, a decision which will affect the whole future course of his life, to limit his practice to a specialty, and

WHEREAS, the actual practice of medicine, with its concomitant final and ultimate responsibilities, is an educational experience, and

WHEREAS, such experience is without equal in the creation of a physician, and

WHEREAS, such experience provides an insight into the relative importance of the various fields of practice not otherwise available, and

WHEREAS, such insight and experience is an important and desirable factor in the decision on what type of practice in which he will engage, and

WHEREAS, a new program could be implemented by stages so that no residency programs would be seriously affected, and

WHEREAS, special exceptions could be made for over-age physicians and those with limiting disabilities.

WHEREAS, it is believed that the adoption of a rule limiting eligibility for residencies to those who have been in actual private patient care would relieve the acute shortage of primary care physicians.

NOW, THEREFORE, BE IT RESOLVED that the Arkansas Medical Society instruct its delegates to introduce and work for the adoption of a resolution in the American Medical Association House of Delegates requiring every medical graduate to engage in private family practice for two years before becoming eligible for a residency.

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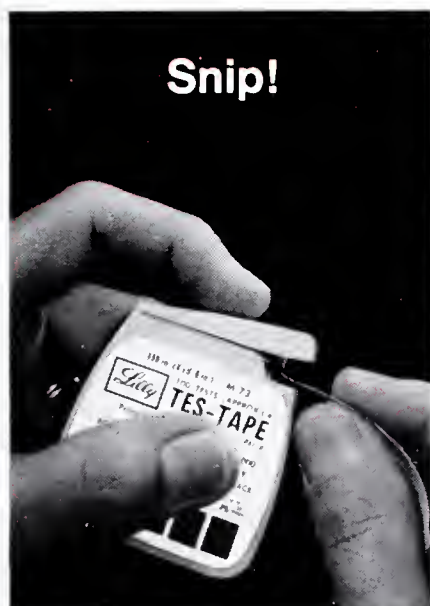
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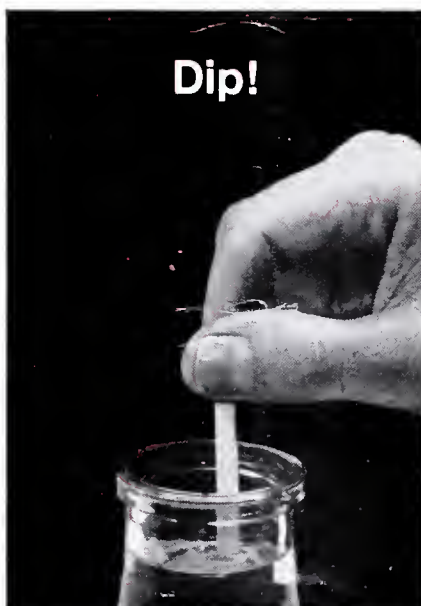
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Clinical Evaluation of Patients with Cerebrovascular Insufficiency

Reece Lewis Crow, M.D.*

In recent years the improvement in techniques of vascular surgery as well as improvement in the drug treatment of cerebrovascular insufficiency has brought about increased interest in the treatment of this disease. Physicians are becoming increasingly aware that cerebrovascular insufficiency is both a medical and a surgical disease. To the family physician treating a patient with symptoms of cerebrovascular insufficiency, two approaches are readily apparent. One is to recommend vasodilators, and the other is to recommend consideration for carotid arteriograms. The latter approach is more scientific, but vasodilators seem to work quite well in a large percentage of patients. So, which is actually giving the patient the best treatment? The following is a brief review of the problem of cerebrovascular insufficiency, and what I feel is the most rational approach to the evaluation of these patients.

The main complication of cerebrovascular insufficiency is obviously a stroke. To place this in its proper perspective, we note that this is one of the leading causes of death in the United States each year, ranking third behind diseases of the heart and cancer. Strokes account for approximately 12% of all deaths. A high percentage of these strokes are preventable. At least one-third, and some estimate as high as one-half, of all strokes are due to arteriosclerotic occlusion of the extracranial cerebral vessels. In other words, the occlusion causing the stroke is in the carotid or vertebral arteries in the neck, in areas which are amenable to surgical correction with the restoration of normal cerebral blood flow. Therefore, the recognition of the signs and symptoms of cerebrovascular insufficiency is important if we are to prevent the occurrence of these disabling and fatal strokes.

The most common area of involvement in the carotid artery is the buildup of atheromatous plaque material at the bifurcation of the common carotid artery into its internal and external branches. This area is located in the neck just below the angle of the mandible and accounts for 99% of all carotid occlusions. Occlusive plaques in other areas of the common carotid arteries are, therefore, infrequent. Atheromatous plaques occlude the vertebral arteries almost exclusively at the origin of these vessels from their respective subclavian arteries. Another cause of decreased cerebral blood flow through the vertebral arteries is the arteriosclerotic occlusion of the subclavian arteries distal to the aortic arch and proximal to the origin of the vertebrals. This may cause not only decreased flow but an actual reversal of blood flow in the vertebral artery. In these cases, blood is shunted from the carotid system in the brain down the vertebral and out the subclavian artery, so that the arm receives blood in preference to the brain. This is the so-called "subclavian steal syndrome" which occurs more often than is generally appreciated. Since the occlusion is in the subclavian artery, the blood pressure reading in the arm on the involved side will be low. The finding of a fairly marked blood pressure differential between the two arms in a patient with symptoms of cerebrovascular insufficiency is a tip-off to this diagnosis. Arteriograms can quite easily establish the diagnosis with certainty.

The partial occlusion and resultant decreased flow in the carotid and vertebral arteries give rise to fairly classical symptoms and neurologic disturbances.

CAROTID

The carotid arteries supply the cerebral hemispheres and deficiency of flow to these areas

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cause the following symptoms:

1. Contralateral motor and sensory deficits, varying from transient weakness of an arm or leg to hemiplegia.
2. Visual deficits on the same side as the vascular lesion due to decreased flow through the ophthalmic artery. Varies from transient blurred vision to ipsilateral monocular blindness.
3. Aphasia may occur if the dominant cerebral hemisphere is deficient in blood flow.
4. Dizziness.
5. Syncope.

VERTEBRAL

The vertebral arteries unite intracranially to form the common basilar artery which supplies the posterior fossa structures: pons, medulla, and cerebellum. Deprivation of adequate blood supply may cause any of the following symptoms:

1. Cerebellar signs; such as, loss of equilibrium, vertigo, and staggering gait.
2. Visual deficits, particularly diplopia; but also blurred vision and even blindness.
3. Dizziness.
4. Syncope.
5. Motor and sensory tract signs may also occur.

Very frequently patients do not fall strictly into either of these two categories and overlapping of symptoms occurs. There are several reasons for this. The ability to circulate blood from the carotid system on one side of the brain to the carotid system on the other is dependent upon a competent Circle of Willis. The same is true in circulating blood from the vertebro-basilar system to the internal carotid system on either side. Since only about 50% of the population has an anatomically complete Circle of Willis, the ability to compensate for deficient flow to a certain area will vary from one patient to another. For this reason, some patients are able to tolerate complete occlusion of a carotid artery with very few symptoms, while others will become hemiplegic when occlusion occurs. Another reason for the overlapping of symptoms is due to multiple artery involvement. Approximately two-thirds of the patients will have occlusive lesions in more than one of the four arteries supplying the brain. All of these lesions are not severe enough to require treatment, but their effect is to reduce the total cerebral blood flow below a critical level at which point

ischemia becomes present and symptoms occur.

Patients with cerebrovascular insufficiency present in one of two ways: transient ischemic attacks, and strokes.

1. Patients who first present to the physician with an acute completed stroke are not candidates for reconstructive surgery. This is strictly a medical disease. Approximately one-third of these patients will have had the stroke due to occlusion of the carotid artery in the neck; but once infarction of cerebral tissue has occurred, they cannot be treated surgically.

2. Patient whose ischemic episodes are transient are quite fortunate in that they are having warning symptoms of an impending stroke. These patients may have transient weakness or numbness of an arm or leg. The symptoms may last from a few seconds to several minutes or even hours. They may have blurred vision or diplopia which clears after a short duration. They may have dizziness or even syncope. By the time they see their physician, examination will reveal a normal general physical and neurologic examination, and they will usually feel perfectly normal. Approximately 50% of these patients with transient episodes of cerebrovascular insufficiency have an atherosclerotic occlusive lesion in their carotid or vertebral artery causing the decreased cerebral blood flow. In the other 50% the occlusive vascular lesion will be in the cerebral vessels and, therefore, beyond the scope of present reconstructive vascular surgery. The patients with obstructing plaques in the extracranial portions of these cerebral vessels can be treated surgically with the removal of the occluding atheromas and complete restoration of a normal cerebral blood flow. Those with intracranial atherosclerosis as a cause of their symptoms must be treated with palliative drugs.

The physical examination is quite helpful in distinguishing between those patients with extracranial blocks and those with cerebral disease and is very simple to perform. The blood pressure is taken in both arms. A marked differential usually means an obstructive buildup of arteriosclerotic plaque material in the proximal subclavian artery and the possibility of the subclavian steal syndrome. Auscultation with the diaphragm of the stethoscope placed just below the clavicles will often reveal a murmur if a

subclavian obstruction is present. If the obstruction is complete, however, there will frequently be no murmur. The carotid arteries are evaluated by listening with the diaphragm placed over the carotid bifurcation which is just below the angle of the mandible. The patient must hold his breath during this examination as the tracheal breath sounds will obscure the murmur caused by a partial carotid obstruction. Palpation of the carotid pulse in the neck reaffirms that the common carotid artery is patent. The internal carotid generally cannot be palpated as it arises posteriorly from the common carotid bifurcation. Therefore, palpation of the carotid pulse in the neck is not helpful in diagnosing occlusive disease at the carotid bifurcation which is the location of 99% of the carotid lesions. The vertebral arteries are evaluated by auscultation in the supraclavicular area. Again it is most helpful to have the patient hold his breath. Next, auscultation of the heart is done. Many cardiac murmurs, especially those related to calcific aortic valve disease, will radiate into the carotid arteries. To place any significance on the bruits heard over the carotid arteries, we must be sure that a cardiac murmur is not present. The primary points in the vascular examination then are to take the blood pressure in both arms and to listen over the areas of most common vascular obstructions.

The probability of a patient with symptoms of cerebrovascular insufficiency having a correctible lesion when no bruits is present is quite small. I have seen several patients in whom no bruit was audible, and a very significant stenosis of the carotid was present. This, however, is most unusual, and it is generally safe to assume that the cause of their symptoms is not a surgically correctible extracranial vascular lesion. Those patients, then, with transient ischemic episodes in whom no murmur is present over the vessels can generally obtain palliative relief in their symptoms from vasodilators and drugs to improve cerebral metabolism. Eventually the involved cerebral vessel usually completely occludes, and stroke is the result. There is nothing that can be done to prevent this sequence of events.

Those patients, however, who have symptoms of cerebrovascular insufficiency, and who have

positive findings on vascular examination should then be evaluated by arteriography. Carotid or four vessel arteriograms can be performed under local or general anesthesia and is a very safe procedure. During the one and a half year I have been in practice, I have done over one hundred carotid arteriograms. There have been no deaths and no significant complications. The degree of obstruction caused by the atheromatous plaque material in the carotid or vertebral vessels can be ascertained with certainty. If a surgically significant obstruction (over 80% luminal obstruction) is present, a reconstructive procedure will be necessary to re-establish the cerebral blood flow to normal. It is not advisable to treat this group of patients with vasodilator drugs. Frequently vasodilators will help the flow into the area which becomes intermittently more ischemic, and therefore give symptomatic improvement. These drugs can do nothing for the atherosclerotic occlusive process in the carotid artery which is causing the symptoms. The occlusive lesion will continue to slowly progress until complete occlusion of the artery occurs. When the atherosclerotic process thus becomes complete, a stroke will occur whether the patient is on drug therapy or not. I have seen several patients in whom this course of events occurred. The patients and physicians were satisfied with the relief of symptoms obtained from drug therapy. The stroke which occurred later was not totally unexpected. The post-stroke arteriograms, however, revealed the obstruction to be in the carotid artery at the carotid bifurcation in the neck, in an area amenable to surgical correction with prevention of the stroke which had occurred. Therefore, I recommend the use of vasodilator drugs for patients with symptoms of cerebrovascular insufficiency who have been proven by arteriography to have cerebral arteriosclerosis and not a highgrade obstruction of the extracranial carotid artery. I also recommend drug therapy for most patients with absolutely negative physical findings. For patients with symptoms of cerebrovascular insufficiency and a bruit over the carotid or vertebral artery, I feel that further workup and arteriograms are essential if we are going to prevent the occurrence of many of these disabling cerebrovascular accidents.



Acoustic Neuroma-Early Diagnosis*

H. A. Ted Bailey, Jr., M.D.,** James J. Pappas, M.D.,** and Sharon S. Graham, M.A.**

Acoustic neuroma was first observed at autopsy in 1777. However, it was 1830 before a diagnosis of acoustic neuroma was reported in a living patient. Sir Charles Bell of England described this patient as having a left total deafness, left facial paralysis, left temporal and masseter muscle paralysis, protrusion of the tongue to the left side, difficulty in speech and swallowing, severe occipital pain, emaciation and difficulty in breathing. The symptoms this patient presented were later described by Cushing as the syndrome of the cerebellopontine angle and are present with large tumors occurring in this area. Acoustic neuromas are benign encapsulated tumors that originate from the neurilemmal sheath of the 8th cranial nerve, arising from either the cochlear or vestibular division, but twice as frequently from the latter.

Henschen in 1915 pointed out that the 8th nerve possesses a neurilemmal sheath as a rule only within the internal auditory canal, and the remainder of this nerve to the brain stem is clothed in neuroglial fibers. This, of course, explains why the usual site of origin is within the canal. Acoustic neuromas account for 8% of all intracranial tumors and for approximately 80% of the tumors at the cerebellopontine angle. They occur twice as frequently in women as in men. A report by Hardy and Crow indicated an incidence of asymptomatic histologic acoustic neuroma in the general population of 2.4%, as they found six unsuspected small neuromas within the internal acoustic canal in 250 temporal bones sectioned from routine autopsies.

The first report of successful removal by surgery of an acoustic neuroma was in 1894 by Sir Charles Ballance using the sub-occipital approach.

This was just one year before he published the first report of repair of the facial nerve by anastomosis. Much later, in 1932, along with Duel he introduced decompression of the facial nerve for Bell's Palsy. In 1904 Panse proposed a translabyrinthine approach, but it was 1911 before Quix became the first to use this new approach for surgical removal of an acoustic

neuroma. Hammers and chisels were the operating instruments in this early procedure. Because of the overwhelming technical difficulties he encountered, the accompanying bleeding, and the extremely poor visibility, Quix discarded this approach.

During the first two decades of surgical removal, the mortality rate was variously reported around 80%, and the sub-occipital approach was the standard procedure used. However, as evidenced by the report of Cushing in 1917, the mortality rate began to drop. Cushing's last report in 1931 indicated only a 4% mortality. This was later to be slightly improved upon by Dandy who reported a mortality rate of only 2% in his last 41 cases. The patients in these reports had medium size and large size tumors, and as a result, in only a small percentage of the cases was the tumor totally removed. This necessitated in many cases repeat surgery for redevelopment of symptoms. Also the large majority of these patients had complete facial paralysis and varying degrees of persisting cerebellar ataxia following surgery.¹

Though patients having acoustic neuromas in these early days most likely presented themselves initially to the otologist with symptoms of dizziness, deafness or tinnitus, very few cases were diagnosed by the otologist simply because of the lack of specific differentiating diagnostic tests. Beginning in 1949 Dix, Hallpike, and Hood used the alternate binaural loudness balance test (ABLB), introduced by Fowler in 1928, reported recruitment to be present in end organ lesions but to be absent in cases with acoustic neuromas.²

Lierle and Reger in 1955 further noted that speech discrimination scores were disproportionately poor when compared with the pure tone loss in cases with acoustic neuromas.³ Then Carhart in 1957 introduced the threshold tone decay test (TDT), a very simple method for qualifying auditory adaptation requiring nothing more than a conventional pure tone audiometer using a continuous tone at various frequencies.⁴ In this way, a patient is tested for the presence of any threshold adaptation over a one minute period. Tone decay exceeding 30 decibels per minute suggests a retrocochlear lesion. In 1959 Jerger developed

*Presented December 16, 1971, University of Arkansas Medical Center, Pediatric Grand Rounds for Faculty and Students.

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the short increment sensitivity index test (SISI).⁵ This was a highly simplified version of the intensity difference limen test in which the patient is asked to respond to a series of twenty 1 db amplitude increments superimposed on a steady carrier tone of the same frequency presented at a sensation level of 20 db. The patient's score is simply the percentage of these twenty increments which he is able to detect at a given test frequency. High SISI scores (60 to 100%) are characteristically yielded by patients with end organ lesions, while low scores (0 to 55%) presumably characterize patients with retrocochlear involvement. A further contribution was made by Jerger in 1960 when he demonstrated with the Bekesy audiometer four types of tracings that may emerge when the threshold sensitivity of an individual is recorded with Bekesy audiometry for both continuous and interrupted tonal stimuli.⁶ A type I tracing was yielded by patients with no impairment of the sensorineural mechanism such as those with pure conductive losses or with normal hearing. Type II tracings were found in patients with end organ lesions, and the type III and IV tracings were felt by Jerger to be pathognomonic of retrocochlear lesions. However, the differentiation between the type II and type IV tracings often is very difficult and sometimes impossible.

Along with the advances in audiologic testing procedures, advances in vestibular testing also occurred. Aschan in 1956⁷ reported a skin electrode technique for measuring eye movements known as oculography and combined with it the bithermal caloric tests introduced in 1942 by Fitzgerald and Hallpike.⁸ The bithermal caloric test helped to evaluate function of the balance portion of the inner ear by stimulating the vestibulo-ocular reflex and producing eye movements known as nystagmus. Nystagmus comes from the Greek word *nystagmos* which means "to nod", as the nystagmoid movements consist of a slow and fast component, and result from a disturbance or stimulation of the vestibular system (labyrinth, 8th nerve, or its central connections). Because Aschan's interest in eye movements was limited to nystagmus, he named his combined procedure electronystagmography (ENG). ENG is performed with eyes closed in a darkened room, thus visual fixation is virtually eliminated, allowing nystagmus to manifest itself and be readily identified and accurately meas-

ured (Fig. 1). Evidence of nystagmus may be tested for by placing the patient's head in various positions to check for the presence of spontaneous or positional nystagmus (Fig. 2), or nystagmus



Figure 1
Patient shown with skin electrodes being applied close to each lateral canthus and a ground electrode applied to the center of the forehead.



Figure 2
Patient shown with head forward, one of the five head positions in checking for positional nystagmus.

may be produced by stimulation of the labyrinth by rotation or caloric means. Caloric stimulation with the use of warm (44°C.) and cool (30° C.) water offers the advantage over rotation testing of separate stimulation of each labyrinth (Fig. 3).

Weakness of responses on one side from stimulation with both warm and cool water indicates pathology in the labyrinth or the 8th nerve and is noted early in cases with acoustic neuroma. The best indication of vestibular disease is the finding of nystagmus, and it is frequently seen early in cases of acoustic neuroma.

Paralleling the advances in both audiologic and vestibular examination was the development of otomicrosurgical techniques paving the way for great new surgical advances in the removal of acoustic neuromas from the internal auditory canal.

William House of Los Angeles reported in 1958 his use of a middle fossa approach for exposure of the internal auditory canal in cases of advanced otosclerosis.¹⁰ His goal was to relieve pressure exerted on the cochlear nerve by the otosclerotic process. While he was not successful in improving the hearing in these cases, he did, however, realize the advantages presented by this approach in removing very early acoustic neuromas still confined to the canal.

He reported the removal of eight very small tumors utilizing this approach. Following his success with this procedure, he then adopted the translabyrinthine approach of Panse applying the new otomicrosurgical techniques, and he was then able to use this approach successfully and the middle fossa approach to remove 47 tumors without a fatality which he reported in 1964.¹¹

Major advantages with the translabyrinthine

procedure are: (1) virtual absence of cerebellar trauma, (2) preservation of facial nerve function in a high percentage of the patients after tumor removal (approximately 64% had total removal), (3) an amazingly brief convalescence following surgery, and (4) mortality greatly reduced. Following this exciting report by House he began to see many more cases, some of which were presenting with large tumors. Along with his neurosurgical consultant and colleague, William Hitselberger, House developed the combined sub-occipital and translabyrinthine approach to handle these larger size tumors. Mortality rate reported by them¹² with the larger tumors was 17% which again emphasizes the importance of early diagnosis in cases of acoustic neuroma. As might be expected, mortality diminishes with experience of the surgeon. Mortality rates now, due to improvements in anesthesia and operative techniques, are less than they were twenty years ago, but probably a mortality of 10% or something less is still unavoidable even in experienced hands and is considerably higher with the less experienced.¹³

With the development of the advances in audiologic testing, vestibular testing, and the monumental contributions to the development of otomicrosurgical removal of early acoustic neuromas, it has become possible and urgent that the otologist make an early diagnosis in patients having acoustic neuromas. These people come to the otologist usually presenting one or all of three symptoms, namely, deafness, dizziness or tinnitus; and therefore, any patient presenting with these symptoms must be investigated thoroughly for evidence of acoustic neuroma.

History is an important consideration, for in addition to the three cardinal symptoms, the patient may also give a history of some numbness of his face, facial twitching, abnormal taste sensations, abnormal tearing, headache, or incoordination of the ipsilateral limbs. Diagnosis can often be made from a history alone in the patient having a large neuroma and presenting with a typical angle syndrome. Unfortunately there is an occasional patient who will present no symptoms until his tumor is fairly large when he will have a sudden onset of vertigo or hearing loss or both. The majority of patients, however, will present with a history of unilateral hearing loss or tinnitus or a mild unsteadiness.

In regard to the audiometric findings there is



Figure 3
Patient shown during bi-thermal caloric stimulation, administered by technician alternating warm (44° C.) and cool (30° C.) water in each ear canal.

no typical audiometric picture, but one frequently seen is a unilateral high tone hearing loss with unusually poor discrimination. This frequently is accompanied by tinnitus; occasionally tinnitus may be the only presenting symptom. The dizziness which the patient describes is usually noted mainly with change of position or is a feeling of unsteadiness; however spells of violent vertigo not unlike those of Meniere's disease can occur. The dizziness may persist for a number of weeks or months and then finally disappear when all functions of the vestibular nerve have been lost as a result of pressure by the tumor and completion of central compensation.

Disturbances of the motor portion of the 7th nerve are seen only as late changes. However, sensory disturbances of the 7th nerve are frequently noted early in the course of the tumor and are manifested by disturbances in lacrimation, hyperacusis, loss of sensation in the posterior superior canal wall, or taste disturbances all on the side of the lesion (Fig. 4). An early finding is thought to be the presence of crocodile tears on the affected side when the patient eats. This occurs as a result of an irritation of the nerve of Wrisberg which accompanies the facial nerve and supplies the lacrimal gland on the same side. Later on, lacrimation is diminished as a result of increasing pressure and reduced function of this nerve. Fifth nerve changes may also be noted, but again sensory involvement occurs much before motor involvement. Fifth nerve sensory changes are indicated by diminished corneal reflex (Fig. 5) and facial changes consisting of reduced sensation to light touch and pain sensation on the same side as the tumor (Fig. 6). Findings of 5th nerve involvement indicate that the tumor is already out of the in-

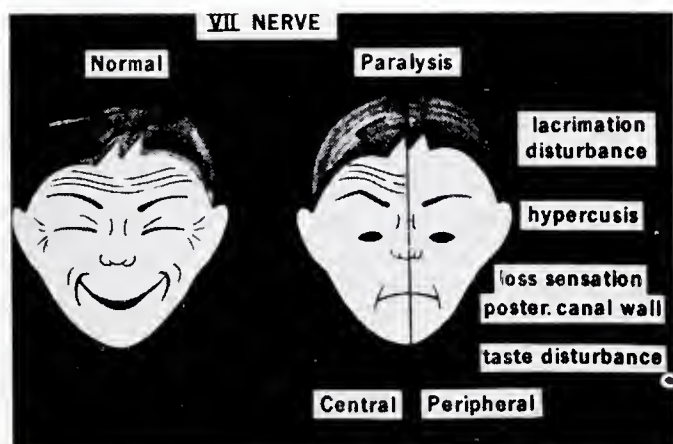


Figure 4
Seventh nerve tests.

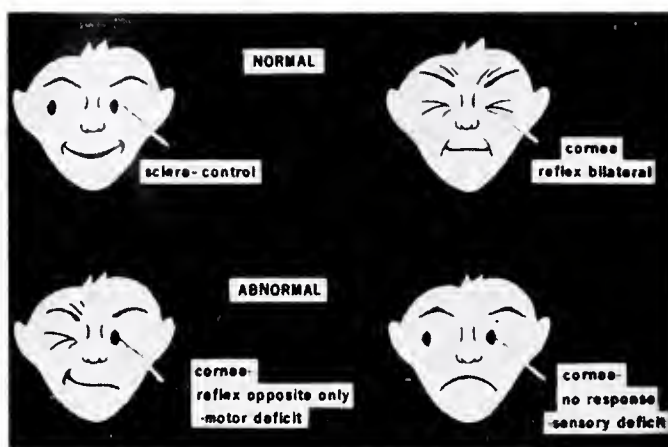


Figure 5
Elicitation and interpretation of corneal reflex.

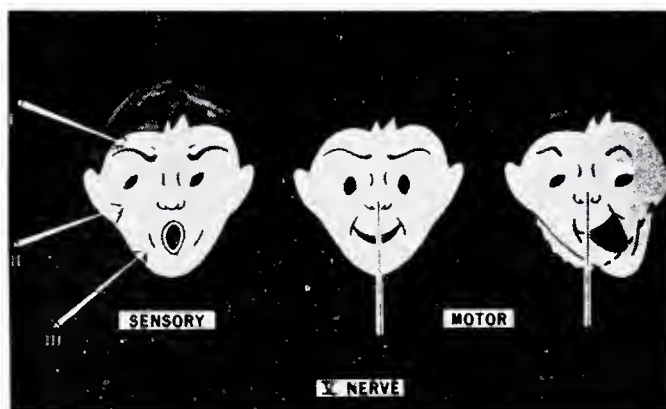


Figure 6
Fifth nerve function tests.

ternal auditory canal and probably touching the brain stem. It is usually estimated that the tumor must be about 2.5 cm. in size by the time 5th nerve changes appear. As a rule, changes in the corneal reflex appear first, and facial sensation changes appear later.

Headache may also be noted in cases with acoustic neuroma. Persistence of severe headaches is well recognized in the late cases with increased intracranial pressure. Headache may also be seen in early cases of acoustic neuroma with the pain centering over the mastoid and probably is the result of dural pressure. This pain is ordinarily relieved by aspirin. A third type of headache is produced as a result of voluntary muscular contractions producing a tension type of headache, probably the result of constant disturbances coming from the vestibular nerve and causing changes in the vestibulospinal pathways. In almost all cases presenting with headaches there are other findings as well.¹⁴

Physical examination of the patient in our office consists of a very careful examination of the ears, canals and drums. This alone can help differentiate some of the other types and causes of deafness. Careful examination of the nose,

mouth, tongue, palate, nasopharynx, larynx and neck will reveal the presence of any involvement of the 9th, 10th (Fig. 7), 11th (Fig. 8), or 12th (Fig. 9) cranial nerves. Tests on the 5th and 7th cranial nerves are carried out to determine the previously described functions. Extra ocular movements are checked in all parameters giving good indication of the function of the 3rd, 4th and 6th cranial nerves.

Tests for station, gait and coordination are used to test both cerebellar and vestibular systems and consist of the Romberg eyes open, Romberg eyes closed, pelvic girdle resistance test (Fig.

10), gait testing for walking, stopping and turning (Fig. 11), past pointing, finger to nose and finger to finger tests (Fig. 12), and station and rebound and rapid movements tests (Fig. 13).

Investigation of the 8th cranial nerve is accomplished by means of audiometric and vestibular testing. Audiometric testing in our clinic routinely consists of pure-tone air and bone conduction and speech audiometry consisting of a test for speech reception threshold (SRT) and discrimination tests (Discrim) (Fig. 14). Tuning fork tests are used to support the validity of the

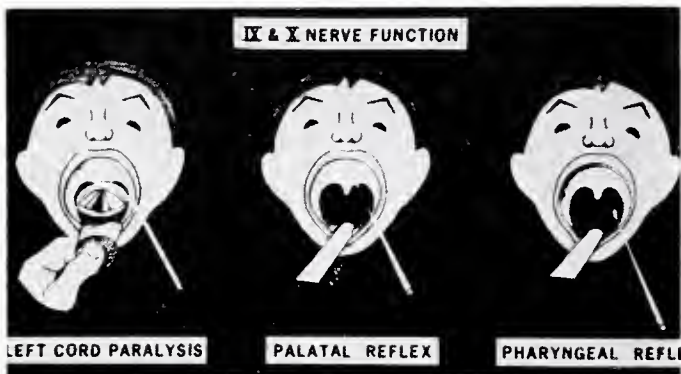


Figure 7
Examination of ninth and tenth nerve function.



Figure 8
Test of eleventh nerve function.



Figure 9
Examination of twelfth nerve function.

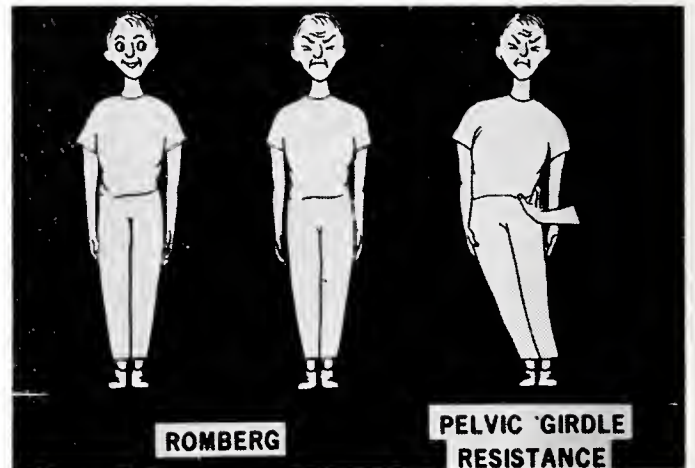


Figure 10
Romberg and pelvic girdle resistance tests.

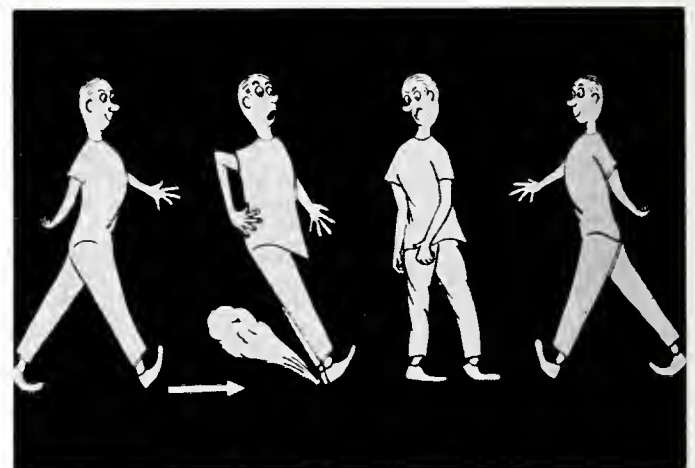


Figure 11
Gait testing: walking, stopping, turning.



Figure 12
Cerebellar function tests: past pointing, finger to nose, and finger to finger.

audiometric tests (Fig. 15).¹⁵ If the presence of a unilateral sensorineural loss is established (Fig. 16), advanced audiometric tests consisting of the ABLB, TDT, SISI and Bekesy audiometry tests are routinely carried out. Following the examination of the cochlear division by audiometric testing, the vestibular division is investigated by means of electronystagmography (ENG) (Fig. 17). Following calibration (Fig. 18), the patient is tested for gaze, optokinetic, spon-

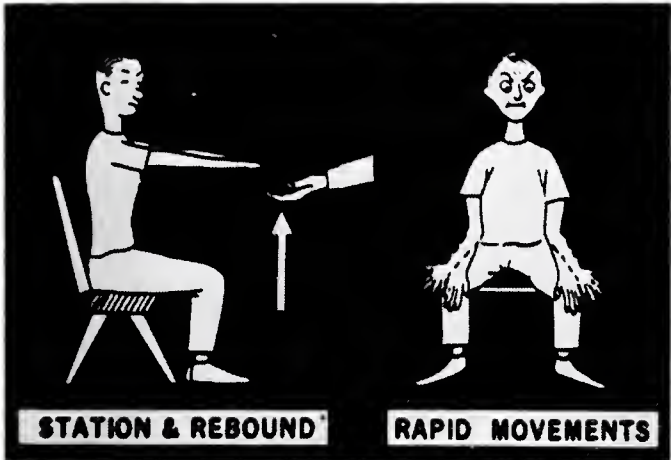


Figure 13
Cerebellar function tests: station and rebound; test for adiadochokinesis.



Figure 14
Speech reception and discrimination screening test.

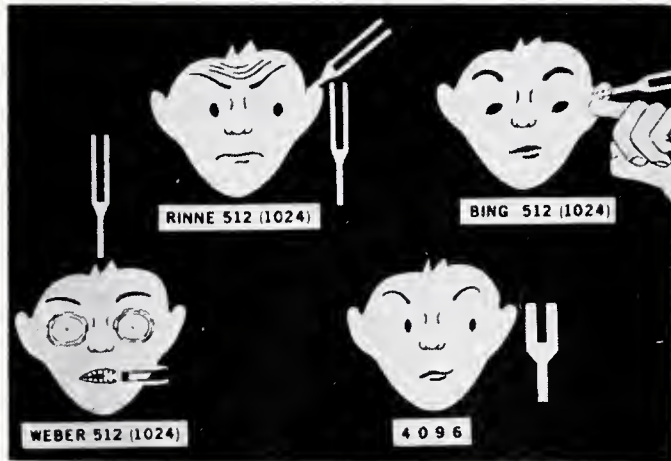


Figure 15
Tuning fork tests.

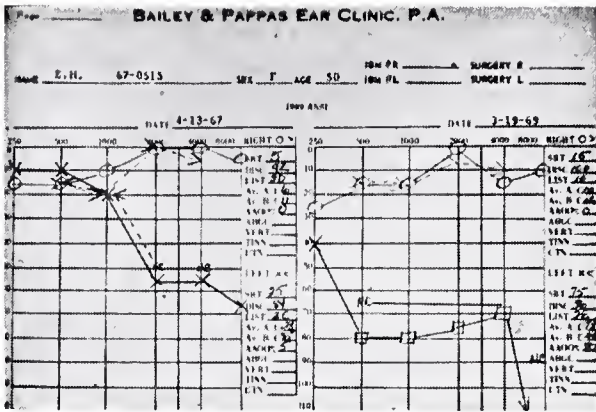


Figure 16
Audiogram showing progression of sensorineural hearing loss (left ear) in a patient with acoustic neuroma.

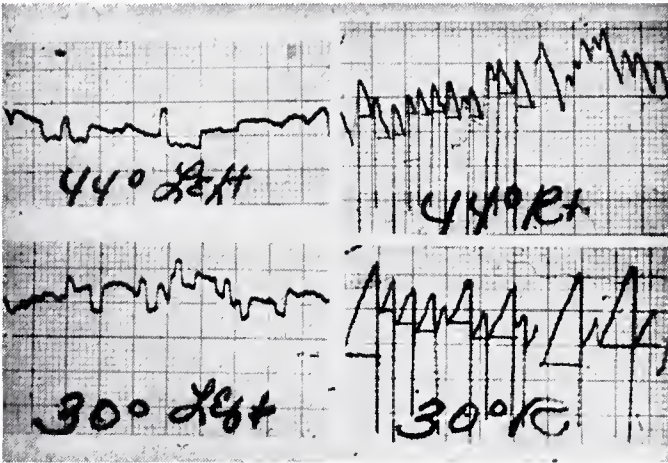


Figure 17
Nystagmogram (ENG tracing) in a patient with left acoustic neuroma. No response on bi-thermal caloric testing in the left ear. Normal responses in the right ear.



Figure 18
Patient shown during calibration before beginning the ENG examination.

taneous and positional nystagmus (Fig. 2), and then responses to stimulation of each labyrinth by means of the bithermal caloric tests are recorded and observed (Fig. 3). This affords an excellent means of determining if the patient does have any vestibular disturbance. This is particularly significant inasmuch as more and more observers are reporting high incidence of changes by ENG in the presence of acoustic neuromas. These changes are manifested by the presence of nystagmus usually beating to the side of the lesion and some degree of weakness by bithermal caloric testing on the affected side. Some changes in the Hallpike positional testing may also be apparent (Fig. 19). Results of the bithermal caloric tests reveal whether the patient has some reduction in function in one labyrinth or the other as revealed by hypoactivity which indicates a peripheral lesion.

Bithermal caloric testing also reveals the presence of directional preponderance of nystagmus in one direction over nystagmus in the other direction, a finding which is indicative of a vestibular disturbance, but it is not considered a localizing finding.¹³

Radiographic examination using polytomography is very helpful in revealing the presence or absence of erosion of the internal auditory canal which may be produced as a result of a tumor in the internal auditory canal. We utilize pantopaque studies of the internal auditory canals in the following situations: (1) if two or more of the advanced audiometric tests indicate a retrocochlear lesion, (2) if there is a marked unilateral reduction or absence of labyrinthine response with the bithermal caloric test, (3) if

there is erosion of the internal auditory canal by polytomography, and (4) if there is other cranial nerve involvement in addition to the 8th cranial nerve. Prior to pantopaque studies the patient's eye grounds should be examined for papilledema. Cerebrospinal fluid is obtained at the time of the pantopaque study and submitted for examination for protein content, as acoustic neuromas are known to produce great elevation in the spinal fluid protein. This elevation is not usually seen unless the tumor is over 1.5 cm. in size. In cases where all studies suggest end organ lesions, the patient is placed on indicated treatment for the end organ lesion and is requested to return at no greater than six to twelve month intervals for continued follow-up and study, as pressure of the tumor on the internal auditory artery and vein in the internal auditory canal can result in endolymphatic hydrops with the patient presenting characteristic findings of an end organ lesion. Therefore, continued follow-up on these people is an absolute necessity.

Summary

The otologist is the first physician to see the patient with acoustic neuroma, due to the three early presenting symptoms of dizziness, deafness, and tinnitus. In these cases the otologist must maintain a very high index of suspicion regarding the possibility of a diagnosis of acoustic neuroma. The most common causes of incorrect diagnosis are the lack of a thorough examination and the assumption that an end organ lesion exists. Routine examination should include pure tone air and bone audiometry, speech audiometry, including speech reception threshold and discrimination tests, and a thorough vestibular examination using electronystagmography (ENG). Those patients having unilateral sensorineural involvement should have advanced audiometric studies consisting of ABLB, SISI, TDT, and Bekesy audiometry. If the results of these tests suggest an end organ lesion and are supported by ENG findings, the patient should simply be treated for an end organ disturbance and be asked to return for a regular follow-up examination. Polytomography is utilized when indicated. Pantopaque studies of the internal auditory canals are ordered: (1) if two or more of the advanced audiometric tests indicate a retrocochlear lesion, (2) if there is a marked unilateral reduction or absence of labyrinthine response with the bithermal caloric tests in the

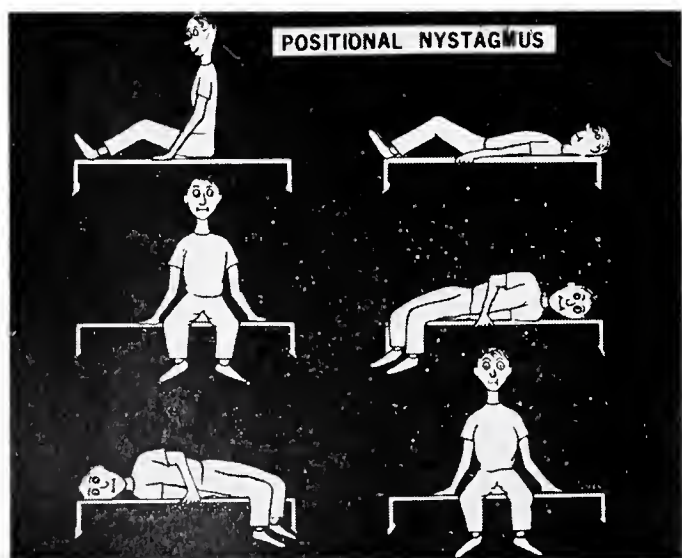


Figure 19
Tests for positional nystagmus.

presence of other cochlear findings, (3) if there is erosion of the internal auditory canal by polytomography or (4) if there is other cranial nerve involvement in addition to the 8th cranial nerve. When an acoustic neuroma is detected, prompt surgical removal is indicated for preservation of the patient's function and life. Small tumors confined to the internal auditory canals may be removed using the middle fossa approach with a good chance of preserving hearing. Medium size tumors around 2.5 cm. can be removed by the translabyrinthine approach, preserving facial nerve function and affording a very low

mortality with essentially no cerebellar deficit. Larger tumors must be removed by either the sub-occipital or the combined sub-occipital and translabyrinthine approach.

With more careful and thorough examinations of patients presenting with dizziness, deafness and tinnitus, many acoustic neuromas will be detected in their earliest stages thus making possible their removal while they are still intratemporal tumors in the internal auditory canal.

Tables 1 through 5 summarize the findings of four surgically proven cases of early acoustic neuromas diagnosed in our ear clinic.

TABLE 1
ACOUSTIC NEUROMAS: HISTORY DATA

PATIENT	SEX	AGE	EAR	PRESENTING COMPLAINTS AFFECTED EAR	DURATION
				Hearing Loss Tinnitus Dizziness	6 mos.
E.H.	F	50	L	Hearing Loss Buzzing Tinnitus Unsteadiness	4 yrs.
E.R.	M	58	L	Hearing Loss Tinnitus	Several years
D.B.	F	45	R	Roaring Tinnitus Stopped up feeling	3-4 years
C.B.	F	57	R		

TABLE 2
ACOUSTIC NEUROMAS: ROUTINE AUDIOMETRIC STUDIES

PATIENT	PURE TONE AUDIOGRAMS (Average of speech frequencies)			DISCRIMINATION	
	Original	Latest	Interval	Original	Latest
E.H.	28db	78 db	2 yrs.	84%	36%
E.R.	75 db	82 db	5 mos.	10%	CNT
D.B.	37 db	62 db	2 yrs.	42%	12%
C.B.	90 db	—		CNT	—

CNT — Could Not Test

TABLE 3
ACOUSTIC NEUROMAS: ADVANCED AUDIOMETRIC STUDIES

PATIENT	ABLB RECRUITMENT		SISI		TONE DECAY		BEKESY
	Original	Latest	Original	Latest	Original	Latest	
E.H.	Absent	CNT	Pos.	CNT	Normal	CNT	II
E.R.	Absent	Absent	Neg.	Neg.	Borderline	Borderline	
D.B.	DNT	Absent	Pos.	Ques- tionable	Normal	Normal	I
C.B.	Partial	----	Neg.	----	Retro- cochlear	----	

DNT — Did Not Test
CNT — Could Not Test

TABLE 4
ACOUSTIC NEUROMAS: OTO-NEUROLOGICAL FINDINGS

PATIENT	EAR	VESTIBULAR FINDINGS WITH ELECTRONYSTAGMOGRAPHY	CORNEAL HITSELBERGER REFLEX SIGN		CEREBELLAR FUNCTION TESTS
			REFLEX	SIGN	
E.H.	L	Bi-thermal caloric responses: Unilateral weakness LE	Diminished	Positive	Normal
E.R.	L	Bi-thermal caloric responses: Unilateral absence LE	Normal	Positive	Normal
D.B.	R	Bi-thermal caloric responses: Unilateral weakness RE Positional nystagmus Right beating	Diminished	Positive	Normal
C.B.	R	Bi-thermal caloric responses: Unilateral weakness RE Positional nystagmus Right beating	Normal	Negative	Normal

TABLE 5
ACOUSTIC NEUROMAS: RADIOGRAPHIC, LABORATORY
& POST-OPERATIVE RESULTS

PATIENT	POLYTOMES	PANTOPAQUE STUDIES	SPINAL FLUID PROTEIN	TOTAL REMOVAL	FACIAL FUNCTION
E.H.	Positive	Positive 4 mos. later		Yes	75%
E.R.	Normal	Positive 5 mos. later		Yes	90%
D.B.	Normal	Positive 5 mos. later	89 mgm. %	Yes	90%
C.B.	Positive	Positive 2 mos. later		Yes	90%

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ACKNOWLEDGEMENTS

Figs. 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19 courtesy of Sidney N. Busis, M.D. Neuro-otologic tests and examination. *Arch. Otolaryng.* 89:27-36, 1969.

Photography by Bill Kennedy, Dept. of Medical Photography, University of Arkansas Medical Center, Little Rock, Arkansas.



Hyperparathyroidism in Chronic Renal Failure

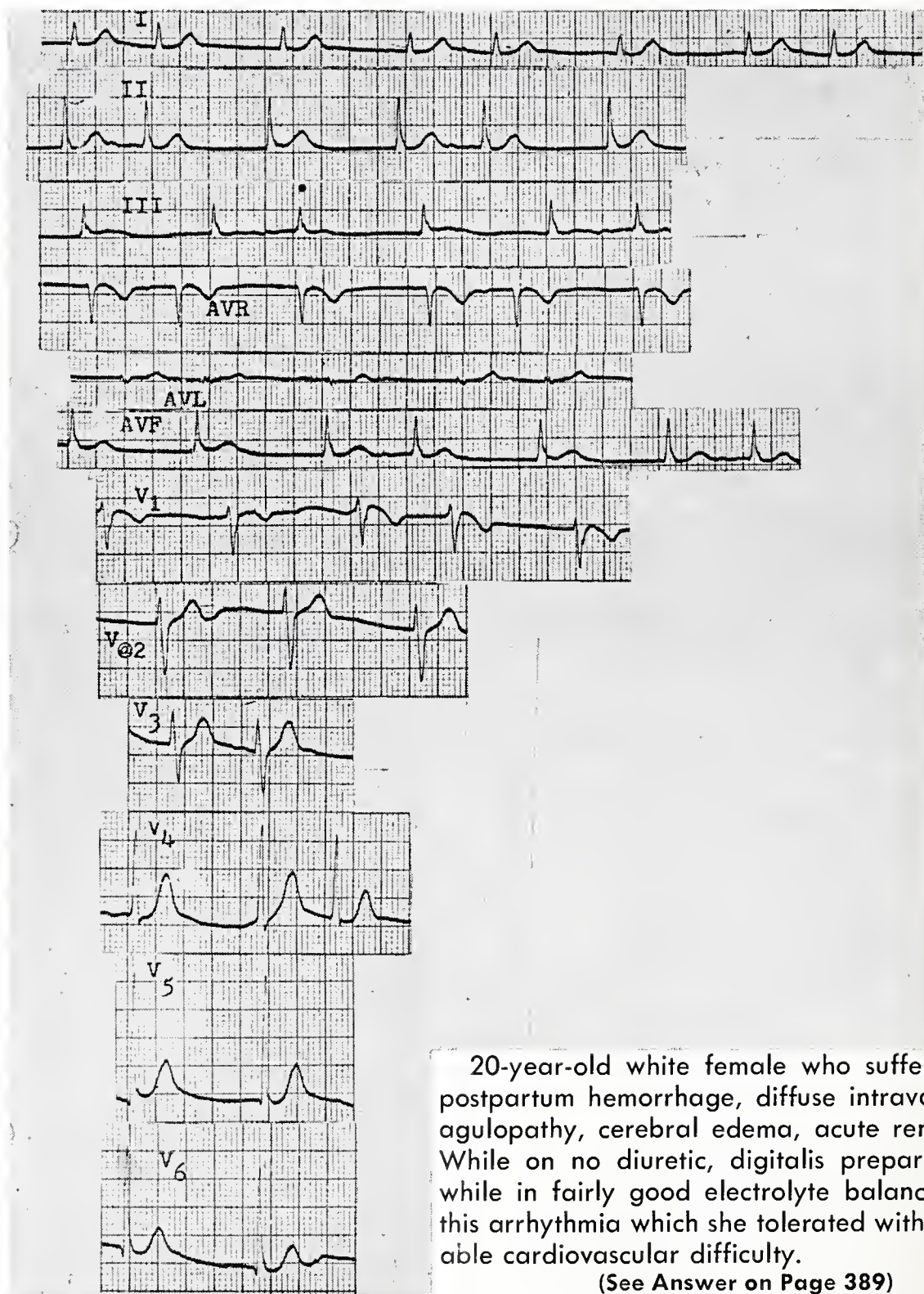
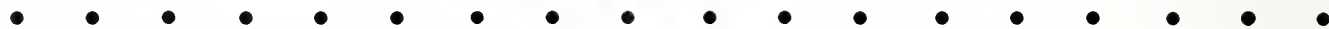
R. M. Buckle (Southampton General Hosp, Shirley, Southampton, England)
Lancet 2:234-237 (Aug 1) 1970

Increased concentrations of immuno-assayable parathyroid hormone were found in the blood of 80% of patients with chronic renal failure. Responses in circulating hormone concentration to alterations in plasma calcium were studied in six patients. In four, acute elevations in calcium were associated with reciprocal falls in the circulating concentration of parathyroid hormone; similar responses were demonstrated in secondary hyperparathyroidism associated with hypocalcemia due to causes such as malabsorption. In two patients with renal failure, elevation of calcium had no effect on hormone concentration, and a similar lack of response was demonstrated in primary hyperparathyroidism due to parathyroid adenoma. Investigation of whether or not acute alternations in calcium cause reciprocal alterations in circulating parathyroid hormone concentration may enable autonomy of the parathyroid glands to be recognized in patients with chronic renal failure.

Vincristine Therapy of Lymphomas and Chronic Lymphocytic Leukemia

D. V. Desai, E. Z. Ezdinli, and L. Stutzman (Roswell Park Memorial Institute, Buffalo 14203)
Cancer 26:352-359 (Aug) 1970

Evaluation of the results of vincristine therapy in 103 patients with lymphoma and chronic lymphocytic leukemia showed that 76% of the patients with reticulum cell sarcoma and 62% of those with Hodgkin's disease responded, while the drug was of little benefit in patients with lymphosarcoma and of no value in lymphocytic leukemia. Complete or marked responses were seen in 52% of patients with reticulum cell sarcoma and 20% of patients with Hodgkin's disease. Unmaintained remission was short, lasting a median of four weeks. Attempts to prolong the remissions with maintenance vincristine therapy were unsuccessful. No serious neurotoxicity was seen in any of the patients receiving a total dose of less than 7 mg. An unequivocal therapeutic response was evident in all patients before the third dose. If no antitumor effect is observed after two doses, further administration is not indicated.



20-year-old white female who suffered severe postpartum hemorrhage, diffuse intravascular coagulopathy, cerebral edema, acute renal failure. While on no diuretic, digitalis preparation, and while in fairly good electrolyte balance she had this arrhythmia which she tolerated without detectable cardiovascular difficulty.

(See Answer on Page 389)

The Department of Cardiology, University of Arkansas Medical Center
John E. Douglas, M.D.



Arkansas' Blood Alcohol Program

In an effort to begin to reduce the number of crashes on our highways, Arkansas has instituted a State-wide Blood Alcohol Program.

Encompassing several individual projects, the Program was initiated with the enactment of an Implied Consent Law in 1969 (Act 106). As in several other states, the law assigned to the State Board of Health the responsibility for adopting rules and regulations pertaining to blood, urine, breath and tissue tests for alcohol content and the certification of test equipment and personnel involved in testing for alcohol. Arkansas Rules and Regulations for Blood Alcohol Analyses were adopted in April, 1970, and distributed in August of 1970 to law enforcement agencies, courts, and other interested parties.

Act 17 of 1969 set the limits of alcohol in the blood at:

- 0.05% or less by weight — not under the influence
- 0.06% - 0.09% — may be considered as evidence
- 0.10% and above — presumed to be under the influence

The Arkansas State Department of Health applied for and received a grant from the National Bureau of Safety, Federal Highway Administration of the United States Department of Transportation which made possible the purchase of 25 Alco-Analyzer Gas Chromatographs and accessories. This instrument was chosen for its versatility, accuracy, specificity and simplicity of operation. The operator who has received the required training has the capability of testing the subject by direct breath, indirect breath, blood or urine. The SM-7 field capture device allows an officer to perform a screen test to determine if the subject is near or over the legal limit of blood alcohol concentration and then to collect a measured amount of breath from the subject on the roadside for analysis later by

qualified personnel at the Gas Chromatograph installations.

A blood or urine sample may also be analyzed at any of these installations by the simple head-space method. Of course, blood samples can only be drawn by a physician, registered nurse, registered laboratory technician or technologist. Seventy-three police officers have been trained to operate this equipment for the analysis of blood, breath or urine and a greater number have been trained to operate it for direct breath tests only.

In addition to 17 Gas Chromatograph installations there are 52 other certified installations as of November 1, 1971 which utilize privately owned Breathalyzers, Photo-Electric Intoximeters and Alco-Tectors. At the end of September, 1971, there were 570 certified operators in Arkansas. Formal training for these operators is made available through the Arkansas State Department of Health and through the Arkansas Law Enforcement Training Academy.

A proficiency testing program has been established by the Arkansas State Department of Health in order that every certified breath testing instrument in the State may be tested and certified quarterly.

The Blood Alcohol Laboratory at the Arkansas State Department of Health analyzes blood samples for both law enforcement agencies and private individuals using the Alco-Analyzer Gas Chromatograph.

One of the major responsibilities of this Program is to collect statistical information through the certified installations. It is then processed, evaluated and disseminated. Such statistics will show where and when the drinking driver is doing his damage, what his age and sex are and other parameters that serve to make up the total picture. It is the hope of all concerned that the application of this data will be of great value in combating the disastrous effects of alcohol on our roadways.



EDITORIAL

Cardiology in Arkansas-1972

James E. Doherty, M.D.*

Scientific progress in the recognition, accurate diagnosis and treatment of cardiovascular disease has taken a real upswing in the past decade. The realization that over 50% of all deaths are due to diseases of the heart and blood vessels makes progress seem slow, but it is really rather obvious when one considers the significant scientific advances.

More adequate treatment of hypertensive disease has been made possible through better diagnosis and appreciation of surgically correctable lesions, in addition to greatly improved pharmacologic management. Not only has this improved mortality and morbidity due to high blood pressure, but it has also inhibited the development of atherosclerosis and associated coronary artery disease and with its own morbidity and mortality. The reduction in cardiovascular mortality in the last 20 years can be attributed largely to these advances in the management of hypertensive disease.

Since Coronary Care Units have become the vogue, their presence in even the smallest of our community hospitals has tended to upgrade the caliber of all medical practice by osmosis—physicians appreciate that physiologic monitoring saves lives in this area and apply its “know how” in other parts of the hospital for their patients’ benefit. These examples of progress in the fields of diagnosis and pharmacology are largely the product of rather sophisticated research. The Coronary Care Unit itself, however, is the product of a Kansas City family practice physician,

whose interest, knowledge and desire for better care for patients resulted in the first CCU. It is apparent how well the melding of basic science, specialization, and family practice have combined in cardiology to bring better medical care to all our patients.

The educational values which have been derived from local resources with assistance from national agencies, have doubtless been one of our greatest local advances. The rural-urban physician of Arkansas now has excellent consultative facilities for the asking; postgraduate programs which attract national interest are being offered by our University with strong support of the Veterans Administration, the Arkansas Regional Medical Program, and the Arkansas Heart Association, as well as our own excellent Arkansas Medical Journal which helps us keep pace with the more recent advances. May, 1972, will mark the second Arkansas-Louisiana Heart Association Annual Scientific Session, this year being held in Little Rock, promising a fine postgraduate program for physicians in our State.

The future of Arkansas Cardiology is promising. I encourage each physician in our State to join me in enjoying what is the most exciting era of medical practice ever seen. We have the greater opportunity to help people and truly serve mankind than many of our predecessors—we must be truly grateful for this opportunity and take advantage of it—a truly striking example of how research, education and the clinical practice of medicine can yield meaningful improvement in the delivery of medical care to the people.

*Professor of Medicine and Head, Cardiology Department, University of Arkansas School of Medicine, 4301 West Markham, Little Rock, Arkansas 72205.

RESOLUTIONS



Dr. Hoyt R. Allen

WHEREAS, the members of the Pulaski County Medical Society note with sincere sorrow the recent death of their colleague, Dr. Hoyt R. Allen, and

WHEREAS, Dr. Allen had been a highly respected member of this Society for forty-five years, and

WHEREAS, his accomplishments in his practice and in his teaching appointments were held in highest praise, and

WHEREAS, Dr. Allen had served as President of this Society,

BE IT THEREFORE RESOLVED:

THAT, in recognition of Dr. Allen's contributions to the profession, this resolution be made a part of the permanent records of the Society, and

THAT, a copy of this resolution be forwarded to Dr. Allen's family as an expression of sincere sympathy, and

THAT, a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. D. Brown, M.D., Chairman
Henry Hollenberg, M.D.
Robert Watson, M.D.

* * *

Dr. R. W. Pickett

WHEREAS, Dr. R. W. Pickett has been a member of our Society for many years; and

WHEREAS, he has earned the respect and the affection of the members of this Society as a friend, as an associate and as a fellow practitioner of medicine and surgery, and his wise and friendly counsel in the conduct of medical society affairs;

BE IT THEREFORE RESOLVED that we are most deeply grieved over the loss of this our friend and fellow doctor and that this loss will be greatly felt by us and will be softened only by the passage of time.

BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the minutes of this Society, and that another copy be sent to his family.

Bowie-Miller County Medical Society
Nathaniel L. Rodgers, President
J. B. Kittrell, Chairman



Woman's
Auxiliary

Exhibit Wins Second Place

The Auxiliary to the Boone County Medical Society placed second with an exhibit presented at the annual meeting of the Southern Medical Association, Miami Beach, Florida, November 1-5, by Mrs. Henry V. Kirby of Harrison, Councilor to Southern from the Auxiliary to the Arkansas Medical Society.

The exhibit was in the division of *Research and Romance of Medicine* and in the group of less than fifty members. The subject was the story of *G. Allen Robinson, M.D.*, and his work in preserving and exhibiting the history of medicine.

School of Information Held

A two-day school of information for county officers, officers-elect, committee chairmen, and members of the Woman's Auxiliary to the Arkansas Medical Society was held in Little Rock in March. Mrs. Robert F. Beckley of Lock Haven, Pennsylvania, president-elect of the Woman's Auxiliary to the American Medical Association, was the special guest speaker.

The participants received the latest information on national health insurance programs, discussed program planning and projects, membership building, Health Manpower and the Arkansas Council for Health Careers, AMA-ERF money making ideas, parliamentary procedure, and publicity and public relations.

ANSWER—Electrocardiogram of the Month

This tracing represents a junctional rhythm, which in fact may be originating in the His-Purkinje conduction system. The QRS complexes are not aberrated, indicating this is supra-ventricular. No P-waves are visible before most QRS complexes, and when present, are associated with a prolonged P-R interval, suggesting an unusually fatigued A-V node.

This type of arrhythmia may be seen in potassium intoxication where there is partial atrial anesthesia, depression of both the S-A and A-V nodes as well as the conduction system of the ventricle. This last point, however, usually causes prolongation of the QRS interval—not present in this ECG. The patient did not have hyperkolemia, and spontaneously reverted to regular sinus rhythm, with no evidence of heart block.

MEDICINE IN THE



THE MONTH IN WASHINGTON

President Nixon said his Administration will expand its programs to improve the nation's emergency medical services and to combat diseases of the heart, blood vessels and lungs.

In the long version of his two State of the Union messages to Congress, the President said the "staggering" U. S. death toll from accidents—more than 115,000 last year—"could be greatly reduced by upgrading our emergency medical services." He said it could be done without new scientific breakthroughs if present knowledge were applied more effectively.

"To help in this effort," he said, "I am directing the Department of Health, Education and Welfare to develop new ways of organizing emergency medical services and of providing care to accident victims. By improving communication, transportation, and the training of emergency personnel, we can save many thousands of lives which would otherwise be lost to accidents and sudden illnesses.

"One of the significant joint accomplishments of the Congress and this administration has been a vigorous new program to protect against job-related accidents and illnesses. Our occupational health and safety program will be further strengthened in the year ahead—as will our ongoing efforts to promote air traffic safety, boating safety, and safety on the highways.

"In the last three years, the motor vehicle death rate has fallen by 13 percent, but we still lose some 50,000 lives on our highways each year—more than we have lost in combat in the entire Vietnam war.

"Fully one-half of these deaths were directly linked to alcohol. This appalling reality is a blight on our entire nation—and only the active concern of the entire nation can remove it. The federal government will continue to help all it can, through its efforts to promote highway safety and automobile safety, and through stronger programs to help the problem drinker."

Nixon promised increased attention to the diseases of the heart, blood vessels and lungs "which presently account for more than half of all the deaths" in the nation.

"I will shortly assign a panel of distinguished experts to help us determine why heart disease is so prevalent and so menacing and what we can do about it," he said. "I will also recommend an expanded budget for the National Heart and Lung Institute."

He also called upon Congress to act upon his proposals for national health insurance, health maintenance organizations and elimination of the monthly fee now charged under Part B of Medicare.

The President said he later will propose legislation "to reform and rationalize" the delivery of social services, including health services.

"We need a new approach to the delivery of social services—one which is built around people and not around programs," he said. "We need an approach which treats a person as a whole and which treats the family as a unit. We need to break through rigid categorical walls, to open up narrow bureaucratic compartments, to consolidate and coordinate related programs in a comprehensive approach to related problems."

In his fiscal 1973 budget, Nixon estimated federal spending on HEW health programs at \$18.1 billion, an increase of \$1.1 billion over the current fiscal year which ends next June 30. A breakdown under broad categories shows:

The fiscal 1973 budget calls for a \$49 million increase—to \$435 million—for delivery of health services programs—health maintenance organizations, regional medical programs and health planning agencies.

Expenditures for Medicare and Medicaid were estimated to increase by \$492 million. The federal share of Medicaid was estimated at \$3.4 billion or 55 per cent of the total cost. Outlays for Medicare were estimated at \$10.4 billion in fiscal 1973.

HEALTH			
(Fiscal Years, Millions of Dollars)			
	1971	1972	1973
	(Actual)	(Est.)	(Est.)
DEVELOPMENT OF HEALTH RESOURCES			
Budget Authority	2,293	2,965	2,851
Outlays	2,201	2,446	2,787
FINANCING MEDICAL SERVICES			
Budget Authority	12,657	15,633	20,115
Outlays	11,946	14,214	14,733
PREVENTION AND CONTROL			
Budget Authority	360	571	737
Outlays	319	382	619
OFFSETTING RECEIPTS			
Budget Authority	-3	-18	-22
Outlays	-3	-18	-22
TOTALS			
Budget Authority	15,307	19,151	23,681
Outlays	14,463	17,024	18,117

Other spending estimates included:

Food and Drug Administration—\$179.5 million, an increase of \$69.7 million.

National Institutes of Health (mostly biomedical research)—\$1.57 billion, an increase of \$139 million. Of this, \$430 million goes to the Cancer Institute.

The President's Council of Economic Advisors, in its annual report to Congress, cautioned that money alone does not hold the solution to the nation's health problems. New criteria for evaluating medical care should be developed, the council said.

The council said that the nation's medical care expenditures totaled \$75 billion—\$358 per person—in fiscal year 1971, an annual growth rate of 4.3 per cent per capita since 1966.

"Although improvement in the health of the population was clearly the ultimate goal of these expenditures, "the council said, "it is also true that the relation between good health and medical expenditures is less than direct. First, our medical dollars may not always be used effectively. Ideally, the preferences of consumers and capabilities of suppliers freely interact in the market to determine the price and amount of the commodity consumed; and this interaction leads to the use of resources that best contributes to the material well-being of people. In the case of medical care, however, distortions in this process occur because, on the demand side, consumers are not always able to judge the service, and, on the supply side, competition is often limited by restrictions on entry into medical practice and hospital services. Although these

restrictions may have been intended to protect consumers, as a side effect they may also impede the efficient utilization of resources. In addition, the dominant position of nonprofit organizations in the market providing hospital services raises other questions about whether incentives to minimize costs are as great in medicine as in other parts of the economy.

"Yet even great improvements in the market for medical care would not solve all health problems. Another important problem arises because good health is related to many factors in addition to medical care. Some of these factors are subject to an individual's control: diet, exercise, smoking, and consumption of alcohol. Other conditions, such as the amount of pollution in the air and water, depend rather on the actions of society as a whole. In addition, there are more elusive influences, like the tension generated by attitudes toward work and other circumstances of modern life. The importance of life styles and environment to health has become much more apparent in recent years.

"To start to answer the general question of how we can best 'produce' health, we must find a way of measuring changes in the level of health. What must be measured is the actual output—health—not simply such inputs as amounts of medicine consumed, days spent in hospitals, or the hours in consultation with doctors. While no comprehensive measures of the national health have been developed, and each existing measure has its limitations, such indicators as mortality rates and disability days have been widely used to trace changes over time and to compare localities. The relationships observed between these measures of health and other variables have revealed a number of paradoxes.

"Since medical care is likely to remain a major instrument for improving the nation's health, and since it is a focal point for public policy, there is a clear need for developing tests for the effectiveness of medical care. At present, we do not have the data required to make such tests, and thus we can evaluate only imperfectly the efficacy of alternative medical care policies."

* * *

The federal government announced the first assignments of federal doctors and other health workers to provide direct patient care in rural and big city areas with critical health manpower shortages.

Teams with a total of 68 medical workers, including doctors, dentists and nurses, will be assigned to 18 communities in 13 states to work with such patient groups as Indians, migrant workers, welfare families and minorities.

The first team, a husband-wife, doctor-nurse duo, was assigned to a 14-bed hospital in rural Jackman, Maine, in September. The second team went to work in Immokalee, Fla., in November. March 1 is the target date for assigning the other 16 teams, a spokesman for the National Health Service Corps said.

The Corps was created December 31, 1970, when President Nixon signed the Emergency Health Personnel Act, which calls for government health workers to provide direct health services to residents of city slums and remote rural areas designated as having critical health manpower shortages.

The lag in starting the project had sparked charges by some Congressional Democrats that the Administration was delaying it. The Administration had replied that recruitment was difficult.

Dr. David A. Kindig, recruitment chief for the Corps, admitted that the major incentive for doctors to join had been the military draft. All 28 doctors among the 68 initial medical workers were recruited from the Public Health Service (PHS) Commissioned Corps, and "many of them are still fulfilling their military obligations," he said.

The teams also include 10 dentists, 18 nurses and 12 other professionals, including pharmacists, dental hygienists, health educators and lab technicians, Kindig said. Recruitment of some team members, like nurses, may be done at the local level, he said.

* * *

The Nixon Administration said that it hopes to transfer eight U. S. Public Health Service (PHS) hospitals and 30 government clinics to local control by June 30, 1973.

Health, Education and Welfare Secretary Elliot L. Richardson said President Nixon's budget for the fiscal year beginning next July 1 "assumes that these facilities will be converted to community use by June 30, 1973." The budget is expected to go to Congress next Monday.

The hospitals, with a combined 2,484 beds, are in Baltimore; New Orleans; Statton Island,

N. Y.; San Francisco; Seattle; Norfolk, Va.; Boston, and Galveston, Tex.

"We cannot yet predict what effect the current reviews of PHS hospitals and clinics will have on those now employed in those installations," Richardson said in a statement. "No change in employment as a result of these reviews will occur this fiscal year (ending next June 30)."

Richardson's announcement said an Administration decision has been made to eliminate 8,087 HEW jobs between now and next June as part of a government-side plan to reduce federal employment.

* * *

President Nixon signed an executive order establishing the Office of Drug Abuse Law Enforcement which will marshal a wide range of government resources "in a concentrated assault on the street level heroin pusher."

Miles J. Ambrose, who had been Customs Commissioner, was appointed to head the new office.

"I am convinced that the only effective way to fight this menace is by attacking it on many fronts—through a balanced, comprehensive strategy," Nixon said in a statement.

He said the Administration has worked for three years to eliminate dangerous drugs at their source, cutting off their international flow.

"Today our balanced comprehensive attack on drug abuse moves forward in yet another critical area as we institute a major new program to drive drug traffickers and drug pushers off the streets of America," he said.

Nixon praised Ambrose, 45, a lawyer and former New York enforcement official, as a man "who knows how to take care of this problem of law enforcement."

Nixon said the office would work through nine regional offices and use special grand juries to gather information about drug traffickers. He said this intelligence will be pooled for use by federal, state and local law enforcement agencies.

The latest FBI uniform crime statistics available show that 451,000 persons were arrested in 1970 for narcotic drug law offenses, up 44 per cent from 1969 but accounting for just 4.8 per cent of arrests for all offenses in 1970.

In 1970, the FBI noted that 53 per cent of all

persons arrested on drug-related charges were under 21 years of age.

ROBINS MAKES CONTRIBUTION

The A. H. Robins Company, without solicitation, forwarded a check for \$200 for use by the Arkansas Medical Society in furthering its professional or educational programs. No conditions or requirements were attached to the donation. The letter accompanying the check follows:

"Dear Mr. Schaefer:

Increasing public interest and involvement in health care and medical advances have, in recent years, created an increasing need for both the medical profession and the pharmaceutical industry to communicate effectively with all segments of the public — professionals, laymen, legislators, and many others.

Just as our industry has found it necessary to expand and improve our communications on these vital questions, we feel sure the state medical associations have felt a similar need to respond to the upsurge of interest. This seems to us to be a matter of some priority.

We in the industry believe an urgent need exists to coordinate our efforts with yours, in keeping our mutual "publics" informed. We

are well aware that this involves increasing expenditures.

Over the years we have sought to provide financial assistance through advertising in your journal, and by helping with other special activities to the extent our budget would permit. In many states we have sought to help build a physician "image" through an award program which provides public recognition to doctors who have rendered outstanding community service.

This year we are augmenting our previous efforts to provide assistance to your organization. Since we do not know in which specific areas we can be of the greatest help, we are enclosing our company check in the amount of two hundred dollars (\$200), for use in furthering such professional or educational programs as you feel will be of the greatest benefit.

All of us at A. H. Robins extend best wishes for a successful and productive year, as you continue to serve the profession in Arkansas.

Sincerely,

/s/ E. Claiborne Robins
E. Claiborne Robins
Chairman of the Board and
Chief Executive Officer
A. H. Robins Company"



PROCEEDINGS OF SOCIETIES

Pulaski County

The Pulaski County Medical Society—together with the School Districts and the State, County, and City Health Departments—sponsored a program in March whereby measles vaccine was offered without charge to all children from one year of age through the sixth grade.

The National Center for Disease Control has warned that measles cases may reach an epidemic level this year.

Synergistic Effect of Certain Amino Acid Pairs Upon Insulin Secretion in Man

J. C. Floyd, Jr., et al (Ann Arbor, Mich)
Diabetes 19:102-108 (Feb) 1970

Individual amino acids were administered intravenously in amounts of 15 gm and again together with 15 gm of a second amino acid as 30-gm mixtures. Synergism in the stimulation of the release of insulin was demonstrated when in the same subjects the sum of the increases in plasma insulin which resulted from the separate infusions of two amino acids was exceeded by that obtained when they were administered as a mixture. A synergistic effect was exerted by arginine and leucine, arginine and phenylalanine, but not by arginine and lysine, arginine and histidine, or by leucine and histidine. Synergism was greater with arginine and leucine than with arginine and phenylalanine, and appears to result from the effects of these amino acid pairs upon the pancreatic beta cell.



PERSONAL AND NEWS ITEMS

Physicians Lecture

Little Rock physicians were among the lecturers at a graduate health seminar offered this term by Henderson State Teachers College in Arkadelphia. Dr. A. T. Gillespie spoke March 6th on "Birth Control Techniques and Sex Education and the Family"; Dr. John M. Tudor spoke March 27th on "Communicable Diseases"; Dr. Jasper McPhail spoke April 3rd on "Smoking and Tobacco"; Dr. William S. Orr, Jr., spoke April 10th on "An Epidemic—Venereal Disease"; and Dr. Jerry D. Blaylock spoke April 17th on "Mental Health and Suicide".

Physician Returns to Little Rock

Dr. J. Thomas Smith recently returned from the Air Force and is practicing Otolaryngology with his father, Dr. John William Smith, at 1415 West Sixth Street in Little Rock. Dr. Smith interned at Christ Hospital in Cincinnati, Ohio; did a year's residency in general surgery at Baptist Medical Center in Little Rock, and three years in otolaryngology at Presbyterian Hospital in New York City. He was chief of the Ear, Nose and Throat Section at Mather Air Force Base Hospital in Sacramento, California, before returning to Little Rock.

Dr. Bell Elected

Dr. L. J. Pat Bell of Helena has been chosen as president-elect of the Mid-South Medical Association. Dr. Bell will assume the post in 1973.

Physician's Office Burglarized

A safe and closet in the office of Dr. Charles H. Kennedy of North Little Rock were forced open and ransacked in February. A large quantity of needles and syringes were taken.

Professional Association Plans Building

The Mountain Home Medical Group, P.A., has purchased a tract of land adjacent to the Baxter General Hospital grounds in Mountain Home. Plans call for a building with business offices, examination rooms, laboratory and X-ray facilities that will initially accommodate eight to ten doctors, but that can be expanded to provide facilities for fifteen doctors. The medical group is presently composed of Dr. Maxwell G.

Cheney, Dr. William R. Snow, Dr. Jack C. Wilson, Dr. Robert L. Kerr, and Dr. Doyle O. Kinder.

Dr. Headstream Guest Speaker

Dr. James W. Headstream of Little Rock was a recent guest speaker at a conference on Nephrology and Urology at the University of Mississippi Medical Center in Jackson, Mississippi. Following the conference, Dr. Headstream remained in Jackson as a visiting professor in the Department of Urology.

Physicians' Articles Published

An article entitled "Primary Cancer of the Liver: A Review of Twenty-Five Cases and Report of Two Prolonged Survivals" by Drs. William D. White and Kerrison Juniper of Little Rock was published in a recent issue of the Southern Medical Journal. Dr. George H. Hazard of Hot Springs was one of the authors of an article on "Referral of Patients with Communicative Disorders" which recently appeared in the same publication.

Emergency Room Physicians

Both hospitals in Fort Smith have named emergency room physicians to their staffs. Dr. Harley C. Darnall and Dr. W. Duane Jones (formerly Medical Director at the Arkansas Tuberculosis Sanatorium in Booneville) will serve as emergency room physicians at Sparks Regional Medical Center.

Dr. Griffith H. Ferrell, previously in private practice in Van Buren, is serving as emergency room physician on weekdays, joining the staff of Emergency Room Professional Associates at St. Edward Mercy Hospital, composed of Drs. Kemal Kutait, Kenneth Lilly, Byron L. Brown, Eldon D. Pence, Lawrence Pillstrom, Ralph Ingram, and H. John Parta.

Physicians Re-elected

The following physicians have been re-elected to active membership in the American Academy of Family Physicians: Dr. E. C. Fields, Marianna; Dr. Ross Fowler, Harrison; Dr. James M. Kolb, Jr., Clarksville; Dr. Jerry D. Morgan, Stuttgart; Dr. Jerry L. Muse, Piggott; Dr. J. Max

Roy, Forrest City; and Dr. Joe Verser, Harrisburg.

Dr. Dwight W. Gray of Marianna has been elected to active membership in the American Academy of Family Physicians.

Dr. Clopton Guest Speaker

Dr. Owen H. Clopton of Jonesboro was the guest speaker at the March meeting of the Jonesboro Licensed Practical Nurses Association. His

subject was "The Cardiac Care Unit and the Cardiac Patient".

Dr. Stroud Appointed

Dr. Paul T. Stroud has been appointed to the Board of Governors of St. Bernard Hospital in Jonesboro. Dr. Stroud has been a member of the hospital's medical staff since 1938 and has served as chief of staff of the hospital for two terms (1965-66).



O B I T U A R Y

Dr. Edward D. McKnight

Dr. Edward D. McKnight of Brinkley died February 6, 1972, at the age of ninety. He was born in DeView, Arkansas.

Dr. McKnight attended Hendrix College and was graduated from the Vanderbilt University School of Medicine in Nashville, Tennessee, in 1903. He interned at Kings County and Bellevue Hospitals in New York City. Dr. McKnight returned to Arkansas and set up his practice in Brinkley in 1904, where he continued to practice until shortly before his death. In 1929, he was appointed to the Arkansas State Board of Health; he served on the Board until 1970. Together with his brother and brother-in-law, Dr. McKnight established the Magnolia Hospital in Brinkley, the first hospital between Memphis and Little Rock. He also helped establish the St. Joseph Home in Brinkley.

Dr. McKnight served as director of the Bank of Brinkley for fifty-seven years and as city councilman for many years. He was a mason, a member of the Rotary Club, and a member of the First Baptist Church. He was a member of the American Medical Association, Arkansas Medical Society, Monroe County Medical Society, the Fifty Year Club of American Medicine and the American Academy of Family Practice.

He is survived by one son, one daughter, four grandchildren, and five great grandchildren.

Dr. Hoyt R. Allen

Dr. Hoyt R. Allen of Little Rock died February 13th. He was seventy-one years of age.

Born March 9, 1900, in Waveland, Iowa, Dr. Allen attended the University of Iowa, Iowa City, Iowa, and was graduated from the University of Arkansas School of Medicine in 1927. He practiced in Little Rock for forty years, retiring in 1968 due to ill health. During his medical career, Dr. Allen served as an Associate Professor of Surgery in charge of the Proctology Department at the University of Arkansas Medical Center; he was a member of the staff of St. Vincent Infirmary, Baptist Medical Center, and was a consultant for the North Little Rock and Little Rock Veterans Administration Hospitals. He was a past-president of the Pulaski County Medical Society and the Arkansas Proctologic Society.

Dr. Allen was a member of the First Presbyterian Church, the Rotary Club, and he was a Mason. He was a member of the Little Rock Civil Service Commission for twelve years.

He was a member of the Arkansas Medical Society, the Pulaski County Medical Society, the American Proctologic Society, and the International College of Surgeons.

Dr. Allen is survived by his wife, Mrs. Martha Lucas Allen; one son, one daughter, one sister, and seven grandchildren.



NEW MEMBERS

Dr. Robert W. Hunter, Jr.

Dr. Robert W. Hunter, Jr., is a new member of the Columbia County Medical Society. He is a native of Little Rock.

Dr. Hunter received his pre-medical education at the University of Arkansas at Little Rock, the University of Arkansas at Fayetteville, and Hendrix College in Conway. He was graduated from the University of Arkansas School of Medicine in 1960 and completed his internship at St. Vincent Infirmary. Dr. Hunter practiced general medicine in Arkadelphia and Lewisville before beginning a residency in Radiology at Arkansas Medical Center, which he completed in 1971.

Dr. Hunter is now a Radiologist at Magnolia City Hospital in Magnolia.

Dr. William R. Daniel

Dr. William R. Daniel is a new member of the Logan County Medical Society. He was born in Helena, Arkansas.

Dr. Daniel received his B.S. degree from Memphis State College, Memphis, Tennessee, in 1965, and his M.D. degree from the University of Arkansas School of Medicine in 1969. His internship and one year of a Family Practice residency were completed at John Peter Smith Hospital in Fort Worth, Texas.

Since July 1971, Dr. Daniel has been associated with Dr. Charles H. Chalfant at 114 West Third Street, Booneville, where he specializes in Family Practice.

Dr. Arthur W. Camp

Dr. Arthur W. Camp, a native of Sheridan, Arkansas, is a new member of the Lonoke County Medical Society.

Dr. Camp received his pre-medical education at Arkansas A & M College. He was graduated from the University of Arkansas School of Medicine in 1967. Dr. Camp's internship was served

at Wilford Hall United States Air Force Medical Center, Lackland Air Force Base. He served in the United States Air Force for four years; approximately two and one-half years of that time he was flight surgeon stationed at Royal Air Force Base in Lakenheath, England.

Dr. Camp has been in the practice of general medicine at the Hazen Clinic in Hazen, since October 1971.

Dr. Jerry Reagan Kendall

Dr. Jerry R. Kendall is a new member of the Ouachita County Medical Society. He was born in McNeil, Arkansas.

Dr. Kendall received his B.S. degree from Southern State College in Magnolia, Arkansas, in 1959 and his M.S. degree from Louisiana Polytechnic Institute, Ruston, Louisiana, in 1965. In 1969, he was graduated from the University of Arkansas School of Medicine. He completed his internship and one year of residency training at John Peter Smith Hospital, Fort Worth, Texas.

Dr. Kendall is in the practice of general medicine at the Garden Oaks Medical Center in Camden.

Dr. Michael Lane Buffington

Dr. Michael L. Buffington, a native of Newport, Arkansas, is a new member of the Sevier County Medical Society.

Dr. Buffington was graduated from the University of Arkansas in 1964 and from the University of Arkansas School of Medicine in 1968. His internship was completed at the Presbyterian Medical Center, Denver, Colorado. Dr. Buffington served in the United States Air Force from 1969 to 1971.

He is associated with the DeQueen Clinic, Ltd., in DeQueen, where he is in the general practice of medicine.

Dr. John Henry Moore

Dr. John H. Moore is a new member of the Union County Medical Society. He was born in El Dorado.

Dr. Moore was graduated from the University of Arkansas and the University of Arkansas School of Medicine in 1960 and 1964, respectively. His internship was completed at Grady Memorial Hospital, Atlanta, Georgia. In 1969, he completed a four-year residency in General Surgery at Charity Hospital in New Orleans, Louisiana. From 1968 to 1969, he served as senior teaching resident in the Department of Surgery at Louisiana State University in New Orleans,

and was Assistant Clinical Director for Surgery at Charity Hospital.

Dr. Moore is Board Certified in Surgery. His office for the practice of General Surgery is at 615 West Grove, El Dorado.

Dr. James Bernard Weedman

Dr. James B. Weedman is a new member of the Union County Medical Society. He is a native of DeValls Bluff, Arkansas.

Dr. Weedman attended the University of Arkansas and, in 1964, was graduated from the University of Arkansas School of Medicine. His internship was completed at Parkland Memorial Hospital in Dallas, Texas, and he remained there for residency training in Internal Medicine.

Dr. Weedman's office, where he specializes in Internal Medicine, is located at 714 West Faulkner in El Dorado.

Dr. William Frank Webb

Dr. William F. Webb, a native of Gravette, Arkansas, is a new member of the Benton County Medical Society.

Dr. Webb was graduated from the University of Arkansas in 1965 and from the University of Arkansas School of Medicine in 1969. His internship was completed at St. Johns Hospital in Tulsa, Oklahoma.

For the past year and one-half, Dr. Webb has been in practice in Decatur at the McCollom Clinic. He is a family practitioner.

Dr. Robert M. Murfee

Dr. Robert M. Murfee is a new member of the Union County Medical Society. He was born in San Diego, California.

Dr. Murfee was graduated from Vanderbilt University, Nashville, Tennessee in 1960. In 1964, he was graduated from Tulane University School of Medicine. Dr. Murfee's internship was completed at Charity Hospital of Louisiana, New Orleans. His residency work in Urology was done at Ochsner Foundation, New Orleans. Following completion of his residency, Dr. Murfee served in the United States Air Force.

Dr. Murfee's office is at 427 West Oak in El Dorado, where his practice is limited to Urology.



THINGS



TO

COME

Postgraduate Course in Pediatrics

A postgraduate course in pediatrics will be presented at the Aspen Institute for Humanistic Studies in Aspen, Colorado, July 30 - August 2, 1972. For further information write: The Office of Postgraduate Medical Education, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, Colorado 80220.

Congress on Occupational Health to be Held

The Thirty-second Annual American Medical Association Congress on Occupational Health will be held at the Drake Hotel, Chicago, Illinois, September 11-12, 1972.

National Cancer Conference Slated

The Seventh National Cancer Conference,

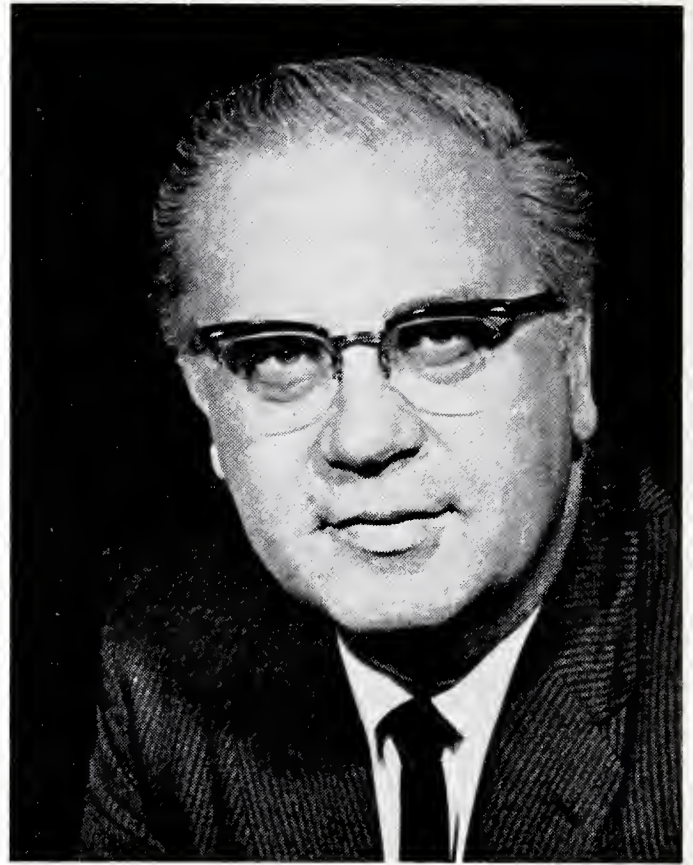
sponsored by the American Cancer Society and the National Cancer Institute, will be held at the Biltmore Hotel, Los Angeles, California, September 27-29, 1972. For further information write: Sidney L. Arje, M.D., Coordinator, Seventh National Cancer Conference, c/o American Cancer Society, 219 East 42nd Street, New York, New York 10017.

Review Session in Rheumatology to be Given

A Review Session in Rheumatology will be given June 10, 1972, at the Fairmont Hotel in Dallas, Texas. The American Rheumatism Association Section of the Arthritis Foundation is offering the Review Session mainly for physicians wishing to take the subspecialty examinations for certification in Rheumatology. The examinations will be given for the first time on October 17, 1972, by the American Board of Internal Medicine. For further information write: American Rheumatism Association Section, The Arthritis Foundation, 1212 Avenue of the Americas, New York, New York 10036.



Dr. Milford O. Rouse



Dr. Richard C. Halverson

MEDICINE-RELIGION SYMPOSIUM

Two outstanding leaders in medicine and religion will serve as guest speakers during a state-wide one-day meeting, Saturday, October 28, 1972 at the University of Arkansas Medical Center.

Dr. Milford O. Rouse of Dallas, past president of the American Medical Association, and Dr. Richard C. Halverson, pastor of the Fourth Presbyterian Church of Washington, D.C., will be keynote speakers for "Strangers When We Meet — Physicians and Ministers."

The meeting, open to all physicians and ministers and their students, is being planned by the Arkansas Medical Society's Committee on Medicine and Religion and is co-sponsored by the University of Arkansas Medical Center, St. Vincent Infirmary, Arkansas Academy of Family Physicians, Baptist Medical Center, Arkansas State Hospital and Consolidated Veterans Administration Hospital, Little Rock.

Text of the program theme is:

"The physician and clergyman are presumed to be professionals in a local community whose mutual efforts are presumed to be helpful. Sometimes when these men meet across the bed of a sick person they are strangers. This need not be so. Why they are strangers is a question that needs some discussion. This symposium is an effort to stimulate dialogue concerning the specific needs of the sick person in whose presence these professionals meet. How can the physician and the minister each complement the effort of the other?"

Various publications will be utilized to promote attendance between now and next fall. However, interested physicians are urged to reserve the date and contact Dr. C. Randolph Ellis of Malvern, committee chairman, or Dr. Fred O. Henker, III, of the University of Arkansas Medical Center, sub-committee chairman.

Dr. Rouse was president of the American Medical Association from June 1967 to June 1968; he then served for a year as president of the AMA Education and Research Foundation. Previously he had served seven years as vice-speaker and then speaker of the AMA House of Delegates, and chair-

man for four years of the Advisory Committee on Medicine and Religion. A practicing gastroenterologist and clinical professor of medicine at the University of Texas (Southwestern) Medical School in Dallas, Dr. Rouse is an active Baptist layman, a deacon and teacher of a men's Bible class at Lakeside Baptist Church.

Dr. Halverson has served as minister in a number of churches, notably the First Presbyterian Church of Hollywood, California, the largest Presbyterian church in the United States. He has made more than 20 separate trips to Asia and has visited every continent. His travels have included several round-the-world trips in the interest of training pastors and laymen working with the problems of refugees, orphanages and dispossessed people, and meeting with leadership groups in many nations. He also works with leadership groups planning Presidential, Governors and Mayors Prayer Breakfasts. He has authored seven books and a weekly letter for business and professional men.



RECENT ADVANCES IN CARDIOLOGY

May 12 and 13, 1972

Worthen Bank & Trust Company Auditorium

Little Rock, Arkansas

Co-Sponsored By:

Arkansas Heart Association — Louisiana Heart Association
University of Arkansas School of Medicine
American Heart Association Council on Clinical Cardiology
Southern Region Heart Committee

Friday, May 12

"Susceptibility to Coronary Artery Disease"
Gerald S. Berenson, M.D.

**"The Influence of Bloodlipids on the Incidence of Coronary
Artery Disease — The Case For"**
Jeremiah Stamler, M.D.

**"The Influence of Bloodlipids on the Incidence of Coronary
Artery Disease — The Case Against"**
Norton Spritz, M.D.

Panel Discussion: "Medical Management of Hyperlipidemia"
W. Sexton Lewis, M.D., Moderator
Gerald S. Berenson, M.D.
Jeremiah Stamler, M.D.
Norton Spritz, M.D.

"Junctional Arrhythmias"
John Douglas, M.D.

"The Role of the Surgeons in the Management of Arrhythmias"
Doyle Williams, M.D.

THINGS TO COME

"Drug Therapy of Cardiac Arrhythmias"

James E. Doherty, M.D.

"Cardiac Dysrhythmias — Case Presentations"

John Phillips, M.D., Moderator

James E. Doherty, M.D.

John Douglas, M.D.

Doyle Williams, M.D.

Friday Night

Arkansas River Twilight Cruise on sternwheeler, "Border Star"

Social Hour

Buffet Dinner

Saturday, May 13

"Hyperlipidemia — An Experimental Surgical Approach"

Henry Buchwald, M.D.

"Studies of Pulmonary Circulation"

Gilbert Campbell, M.D.

"Clinical Results in Surgical Treatment of Hyperlipidemia"

Henry Buchwald, M.D.

Panel Discussion: "Surgical Management of Hyperlipidemia"

Alton Ochsner, M.D., Moderator

Gerald S. Berenson, M.D.

Henry Buchwald, M.D.

Gilbert Campbell, M.D.

Registration Fee: \$35.00 for non-members \$30.00 for members

\$15.00 for wives on cruise (includes transportation to and from dock, social hour, buffet dinner and cruise)

This program is acceptable for nine prescribed hours by the American Academy of Family Physicians.



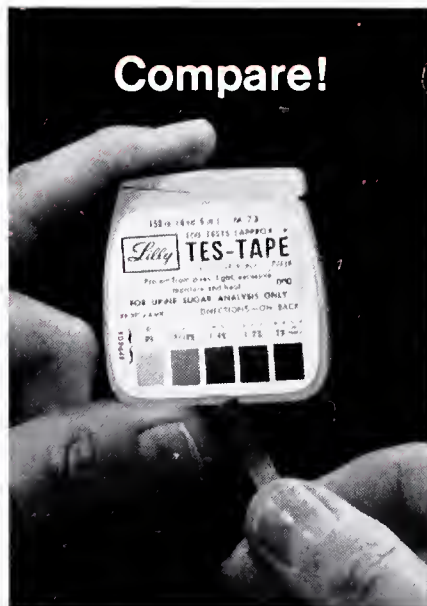
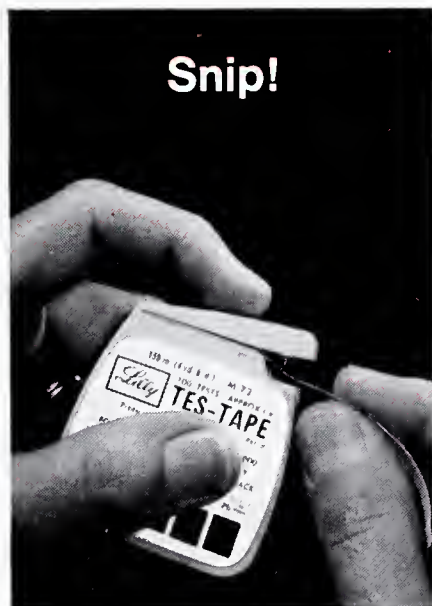
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May, 1972

Vol. 68 No. 12

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ve or see the Direction Circular. Merck Sharp & Dohme,
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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL[®] (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large round- worm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 68, No. 12. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

Will the Delivery of Health Care Be Improved by the Use of Chiropractic Services?*

H. Thomas Ballantine, Jr., M.D.**

ABSTRACT — The unprecedented demand for medical services in the United States, coupled with the increasing involvement of governmental agencies in paying for them, has led politicians and others to press for the inclusion of chiropractic services as an alternate method for providing health care in programs sponsored by the federal government. There is reason to believe that the public, the politicians and the physicians are in large measure ignorant of or indifferent to the fundamental problems involved in such a proposal. A review of existing information relative to the theory, scope and quality of chiropractic practice and the education of chiropractors leads to the conclusion that the use of chiropractic in health-care programs is not in the public interest.

The passage of two national health programs, Medicare and Medicaid, initiated a series of events in 1966 that have now culminated in a situation called "a crisis in health care." Although there is evidence¹ that the health of the American people as measured by such statistical indexes as infant mortality and longevity is improving, critics of the American system of health care evidently believe that this progress is not as great or as fast as it could and should be.

Indisputable, however, is the fact that the passage of the Medicare and Medicaid Acts did provoke an unprecedented demand for medical services — a demand that the medical profession was ill equipped to satisfy. Partial satisfaction resulted in an unanticipated increase in the cost to the government for medical services. In response, the government is desperately searching for methods of delivering health care that will lower cost and increase availability without impairing quality.

The chiropractors of the United States are independent practitioners who consider them-

selves competent to treat virtually all kinds of human ailments. They have requested inclusion of chiropractic services in national, state and local health-care programs as "an alternative form of providing services already approved [for] MD's and DO's."² Their requests have been accompanied by such intense political pressure that the Medicaid programs of about half the states include payment for chiropractic services. About 40 states require that chiropractors be paid for services to beneficiaries of their Workmen's Compensation Acts. Finally, 109 members of Congress have lent their names to bills whose intent is to require inclusion of chiropractic services to Medicare beneficiaries.

In 1967 the Congress of the United States directed Wilbur J. Cohen, Secretary of Health, Education and Welfare, to inaugurate a study "relating to the inclusion under the supplementary medical insurance program (Part B of Title XVIII of the Social Security Act) of services of additional types of licensed practitioners performing health services in independent practice." Secretary Cohen formed two committees of ad hoc consultants to study the following independent disciplines: physical therapy; occupational therapy; speech pathology and audiology; clinical psychology; social work; corrective therapy; optometry; naturopathy; and chiropractic.

The report of these consultants, entitled "Independent Practitioners Under Medicare," was transmitted to the Speaker of the House of Representatives on December 28, 1968. In reference to chiropractic, the conclusion was as follows:

Chiropractic theory and practice are not based upon the body of basic knowledge relating to health, disease and health care that has been widely accepted by the scientific community. Moreover, irrespective of its theory, the scope and quality of chiropractic education do not prepare the practitioner to make an adequate diagnosis

*Reprint from "The New England Journal of Medicine."

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and provide appropriate treatment. Therefore, it is recommended that chiropractic services not be covered in the Medicare program.³

This essay will review the premises upon which that conclusion and others of a similar nature are based since the volume of evidence currently available and the integrity of the persons who have gathered it render doubtful the possibility that new, more or better information could be obtained by additional investigation.

There seems to be little more that concerned physicians, scientists and educators can do about this important problem so long as they remain within their own territories. There is, however, a social ethic that has been termed "the moral obligation of the informed citizen." If the scientific and medical communities examine the existing evidence on chiropractic and find the conclusions derived therefrom credible, they have an obligation to make their opinions known to those outside their own communities who value and have need for their judgment. On the other hand, if they doubt the credibility of the conclusions, they have an equal obligation to make their doubts known. But the medical and the scientific communities can no longer enjoy the privilege of remaining uninformed and silent on this vital issue.

What Is Chiropractic?

That there are no universally accepted definitions of chiropractic is probably the result of a schism between the chiropractors. One group, represented by the International Chiropractors Association (ICA), defines chiropractic as "... that science and art which utilizes the inherent recuperative powers of the body, and deals with the relationship between the nervous system and the spinal column, including its immediate articulations, and the role of this relationship in the restoration and maintenance of health . . ."

Another group, represented by the American Chiropractic Association (ACA), states that chiropractic is "... the study of problems of health and disease from a structural point of view with special consideration given to spinal mechanics and neurological relationships."⁴

The Massachusetts Chiropractors Association used the following legal definition when it obtained licensure from the Legislature of the Commonwealth: "Chiropractic, the science of locating and removing interference from the transmission of expression of nerve force from the human

body, by the correction of misalignments or subluxations of the bony articulations and adjacent structures, more especially those of the vertebral column and pelvis for the purpose of restoring and maintaining health."

This description was first used in 1955, when an unsuccessful attempt was made by chiropractors to overturn a ruling of the Supreme Judicial Court of Massachusetts that the practice of chiropractic was the practice of medicine. Paragraph Four of their petition stated in part:

Chiropractic is a modern scientific method of healing, based on the theory that most human ailments or diseases are the results of a displacement of the vertebrae in the spinal column, resulting in abnormal pressure upon the nerves as they emerge. Such pressure prevents the constricting nerves from transmitting to the various bodily organs the mental impulses necessary for proper function. Chiropractic proceeds on the principle that the nerves emanating above each vertebra regulate particular organs and, hence, the cause of different ailments and diseases can be localized; that health is possible when all organs function harmoniously and that by ascertainment of the subluxation of the spine and by proper adjustment to release the pressure on the nerves caused thereby the cause of the disease is removed and the body rendered capable of natural restoration to good health. The chiropractic method of adjustment is purely manual, and never resorts to drugs or surgery, and is the antithesis of the germ theory taught and accepted by physicians and surgeons and who treat human disease as conquerable by the administration of drugs and medicines.

This last explanation of chiropractic is in accord with the philosophy of the members of the ICA, who number about 4,000 and cling tenaciously to that orthodox philosophy of the founder of chiropractic, which restricts diagnostic efforts to a determination of structural changes in the spinal column and the method of treatment to spinal adjustment.

The ACA, with about 7,300 members, has departed from the original orthodoxy by including dietary and nutritional supplementation and physiotherapy in its treatments although chiropractic adjustment is still the mainstay.

Birth of the Theory

Chiropractic adjustment for treatment of human illness was "discovered" by Daniel David Palmer, a tradesman, in 1895. In a textbook, *The Science, Art and Philosophy of Chiropractic*, published in 1910, republished in 1966 and still currently used by chiropractic colleges, Palmer stated that for nine years before 1895 he had been a magnetic healer and was possessed by a desire to

answer the question: "... why one person was ailing and his associate, eating at the same table, working in the same shop, at the same bench, was not." On September 18, 1895, he "adjusted" a vertebra "... by using the spinous process as a lever ..." of the spine of a deaf janitor named Harvey Lillard. By "racking" the vertebra into place, he allegedly restored hearing. Palmer further stated in his textbook:

... Shortly after this relief from deafness, I had a case of heart trouble which was not improving. I examined the spine and found a displaced vertebra pressing against the nerve which enervates (sic) the heart. I adjusted the vertebra and gave immediate relief ... nothing accidental or crude about this. Then I began to reason, if two diseases, so dissimilar as deafness and heart trouble came from impingement, or pressure on nerves, were not other diseases due to a similar cause? Thus the science (knowledge) and art (adjusting) of chiropractics were found at that time.

... I am the originator. The Fountain Head of the essential principle that disease is the result of too much or not enough functioning (sic). I created the art of adjusting vertebrae, using the spinous and transverse processes as levers, and named the mental act of accumulating knowledge, the cumulative function, corresponding to the physical vegetative function — growth of intellectual and physical — together, with the science, art and philosophy — Chiropractic ... it was I who combined the science and art and developed the principles thereof. I have answered the time-worn question — What is Life?⁵

This theory of chiropractic, originated in 1895, forms the foundation for current chiropractic practice.

Growth and Development

In 1897, D. D. Palmer founded the Palmer Infirmary and Chiropractic Institute in Davenport, Iowa. One of his first pupils was his son, B. J. Palmer, who was destined to guide the development of national chiropractic over the next 50 years. From this "Fountain Head" came the followers who were to found schools of chiropractic throughout the United States. Their number has waxed and waned: in 1967 there were 12 chiropractic schools*; the Palmer College of Chiropractic in Davenport, Iowa, is the oldest and largest, with a 1967 enrollment of 936. In that same year enrollment in 10 of 12 schools was 2,273.

It is estimated that there are between 15,000 and 17,000 chiropractors in active practice in

the United States and that they treat about 3,000,000 persons annually.^{6,7}

Although the chiropractors have been given license to practice in 48 of the 50 states, the apparent intent of licensure is "to limit chiropractors' functions to a sphere in which they are supposedly qualified, to assure that they meet specific educational requirements, and otherwise to control their activities."⁸ The fallacy of such an approach was explained in the 1967 "Report of the National Advisory Commission on Health Manpower": "Attempts to control unscientific schools of practice or cultism by licensure cannot give unscientific practices a scientific basis but can endanger the public by giving unscientific schools, such as chiropractic, protection through the sanction of law."⁹

Scope of Chiropractic Practice

This, the most important aspect of chiropractic activity, was reviewed by the late Henry Higley, M.S., D.C., of the Los Angeles College of Chiropractic, as follows:

We realize that a large section of the nonchiropractic public appears to assume that chiropractic is confined to the treatment of diseases of the back. They seem to believe that the patients of doctors of chiropractic are limited to those suffering from sciatica, torticollis and similar conditions affecting the musculature of the back. The careful compilation of patient data from the 1953 records of our chiropractic clinic shows that well over sixty-five different pathologies (e.g., gastrointestinal problems, genitourinary problems, cardiovascular problems, anemia) were represented.¹⁰

In a survey of the American Chiropractic Association made in 1963 and presented to the Department of Health, Education, and Welfare in 1968, 85 per cent of the chiropractors said that they treated musculoskeletal problems more frequently than any others. However, 81 per cent reported that other than musculoskeletal abnormalities were first, second or third among those most frequently treated. Included in the report were such conditions as headache, sinusitis, constipation, hypertension, gallbladder (sic), anemia, chronic heart conditions, poliomyelitis, diabetes and rheumatic fever. The method of obtaining these diagnoses is not known.¹¹

A report by the Palmer Clinic submitted to the HEW study states:

The B. J. Palmer Chiropractic Clinic presents these case records to demonstrate the effectiveness of Chiropractic with cases medically diagnosed as multiple sclerosis, encephalitis or sleeping sickness, hydrocephalus, epilepsy, sciatica, cirrhosis and cancer of the liver, and tumors. It is hoped these records will benefit both the

*The American Chiropractic Association announced in late 1968 that the Chiropractic Institute of New York had been "affiliated" with the National College of Chiropractic in Lombard, Ill., and its students transferred to National. The ACA also announced in late 1971 that Lincoln Chiropractic College in Indianapolis, Ind., had been "amalgamated" with National College, and its students transferred to National.

chiropractor and any interested lay person who may chance to read them.¹²

These three examples document the fact that chiropractors consider themselves competent to diagnose and treat the broad gamut of human illness according to chiropractic theory as laid down in 1895.

Educational Qualifications

The report of the National Advisory Commission on Health Manpower stated:

Chiropractic education and training are appallingly inadequate as has been well documented by both independent and chiropractic studies. There are currently 12 schools of chiropractic recognized by the two chiropractic associations, but none is accredited by any agency recognized by the National Commission on Accrediting or the United States Office of Education, and no school has full accreditation even by the American Chiropractic Association or the International Chiropractic Association [sic]. The faculties of these schools are poorly qualified, and the ratio of faculty to students is extremely low. Admission requirements, although also low, are dubiously enforced. A study of actual admission applications shows that chiropractic schools do not observe their own admission rules and admit students with less than a high school education and questionable credentials.¹³

Self-surveys of eight chiropractic schools from 1965 to 1967 disclosed that 105 faculty members held doctors of chiropractic degrees. Only 50 of the faculty had attained the bachelor's degree; 12 held masters degrees; and three of four doctorates were schools of osteopathy. Admission requirements for students varied: all schools, except Palmer, required at least a high-school diploma for admission, but four of those schools required only a "C" average in high school. The Palmer catalogue did not state the educational requirements for admission. In three schools 2.0 to 5.8 per cent of matriculating students had attained a bachelor's degree.¹⁴

All currently active chiropractic schools offer a four-year course of 4000 hours leading to a degree of doctor of chiropractic. The first two years are devoted to basic-science subjects, and the remainder to the "clinical application" of chiropractic.

Textbooks and teachings vary widely although they all support the fundamental tenets of Palmer. As an example, the preface to *Rational Bacteriology*, published in 1953 and in current use, contains the following statement by C. W. Weiant, D.C. Ph.D.* (dean emeritus of the New York Institute of Chiropractic and a member of

the ACA's Commission on Standardization of Chiropractic Principles):

This Outline is written with two objects in mind. It aims first of all, to give to the student and the drugless practitioner those basic facts and principles of bacteriology which underlie the hygiene of the communicable diseases and sanitation, which create an appreciation of the true role of bacteria in disease, and which make possible the interpretation of diagnostic laboratory reports. Incidentally, this is the knowledge usually required to pass a state board examination in the subject.

The book has, however, a second more important object, namely that of making public some of the outstanding results of medical and bacteriological research of the past few years which undermine the whole germ theory of disease causation and the practices of serum and vaccine therapy or prophylaxis based thereon. It is hoped by the authors that this material, all of which will be found carefully authenticated may speedily become of service not only to professional groups, but to all laymen, especially parents and educators, who are interested in having the truth prevail.¹⁵

The authors of the textbook, J. R. Verner, D.C., and R. J. Watkins, D.C., were careful to differentiate chiropractic theory from medical teachings; they advised chiropractic students about passages that would not be accepted as answers to state board examination questions. Some of their chiropractic statements are as follows:

Gonorrhea and spinal meningitis respond readily to non-medical methods.¹⁶

Tuberculosis is not contagious in adults.¹⁷

Diphtheria antitoxin and toxoid are both not only worthless in practically every case but also virulent and injurious in all cases.¹⁸

A *Textbook on Chiropractic Diagnosis* by James N. Firth, D.C. Ph.C., has this to say about the treatment of leukemia:

Since the blood-forming tissues are innervated by the sympathetic division of the vegetative nervous system, the indicated adjustments are in the dorsal area of the spine. Inspection, palpation and nerve tracing and x-ray study are of assistance in determining the location of the nerve interference.¹⁹

Chiropractic Research

A universally accepted tenet of scientific research is that a "discovery" in any discipline must be documented by the discoverer and his supporters by scientific evidence. In contrast, the chiropractors and their proponents have challenged the medical profession and the biologic scientists to disprove the theory and efficacy of chiropractic. Nevertheless, the Study Group of HEW undertook to search for scientific evidence that chiropractic was of value in diagnosing and

*Dr. Weiant received the Ph.D. degree in anthropology from Columbia University, New York City. The subject of his doctoral thesis was "An Introduction to the Ceramics of Tres Zapotes, Vera Cruz, Mexico."

treating human illness. It came to the following conclusions:

There is a lack of research in this field and "considering the qualifications of the faculties of chiropractic schools, it seems unlikely that most faculty members with the qualifications listed would have the capability to undertake basic research therein.

Another major reason for the lack of research is that the chiropractic philosophy has led to a de-emphasis on research since the chiropractor believes he already knows 'basic truths and principles. . . .'²⁰ The report further stated:

Some difficulties are encountered by nonchiropractors in evaluating chiropractic research. One is that the non-chiropractor looks for documentation of diagnosis, the accuracy of which is central to the validity of the research; but to the chiropractor, naming the disease is not so important, as mentioned in an earlier quotation, since subluxation is considered the cause of the illness. This raises the problem of definitions, since the non-chiropractor may not understand the chiropractor's interpretation of this causal relationship. Measurements of "improvement" also present problems, the nonchiropractor looking for specific indices to show improvement. In one chiropractic study, improvement is shown in terms of readings on a "Neurocalograph", an instrument that is not used for this purpose in other disciplines. Finally, tests of statistical significance are difficult to apply to chiropractic research, due to small study samples.²¹

Discussion

Suggestions are made from time to time that the medical profession take a new look at chiropractic for the purpose of enlarging the manpower pool available to deliver health care.²² Such suggestions serve to emphasize the fact that many nonchiropractors, whether they are physicians, potential patients or politicians, are either unaware of the nature of chiropractic or indifferent to the facts presented in this analysis. Part of the problem may be that before about 1966, the entire burden of explaining chiropractic theory and practice was borne by the American Medical Association and that its findings were automatically rejected unread on the grounds of bias. During the last five years, however, there have been numerous independent assessments of this cult. For example, the American Public Health Association issued the following policy statement on November 19, 1969:

"It appears that the practice of chiropractic and naturopathy constitutes a hazard to the

health and safety of our citizens. The American Public Health Association therefore urges:

1. That Congress amend Title XIX of the Social Security Act to specify that Federal funds not be used to match State Medicaid expenditures for chiropractic or naturopathic services.

2. That Congress not amend XVIII of the Social Security Act to permit coverage of chiropractic or naturopathic services in the Medicare program.

3. That State Legislatures and health agencies not include chiropractors and naturopaths under State Health Programs.

4. That States re-evaluate their existing licensure programs for chiropractors and naturopaths to determine whether such licenses should be further restricted or abolished, and that existing restrictions be more rigorously policed.

5. That professional and consumer groups undertake appropriate consumer education on the hazards of unscientific health care, including chiropractic and naturopathy."

The National Advisory Commission on Health Manpower, previously quoted, has also said: "Although chiropractic is not the only existing cult, it is the only one which still constitutes a significant hazard to the public . . . The basic assumption of licensure of chiropractors — that licensure facilitates regulation — should be re-examined."

Finally, there are these additional conclusions from the HEW Report:

1. There is a body of basic scientific knowledge related to health, disease and health care. Chiropractic practitioners ignore or take exception to much of this knowledge despite the fact that they have not undertaken adequate scientific research.

2. There is no valid evidence that subluxation, if it exists, is a significant factor in disease processes. Therefore, the broad application to health care of a diagnostic procedure such as spinal analysis and a treatment procedure such as spinal adjustment is not justified.

3. The inadequacies of chiropractic education, coupled with a theory that de-emphasizes proven causative factors in disease processes, proven methods of treatment, and differential diagnosis, make it unlikely that a chiropractor can make an adequate diagnosis and know the appropriate treatment, and subsequently provide the indicated treatment or refer the patient. Lack of these capabilities in independent practitioners is undesirable because: appropriate treatment could be delayed or prevented entirely; appropriate treatment might be interrupted or stopped completely; the treatment offered could be contraindicated; all treatments have some risk involved with their administration, and inappropriate treatment exposes the patient to this risk unnecessarily.

4. Manipulation (including chiropractic manipulation) may be a valuable technique for relief of pain due to loss of mobility of joints. Research in this area is in-

adequate; therefore, it is suggested that research that is based upon the scientific method be undertaken with respect to manipulation.²³

The statements quoted above are further substantiated by such investigations as "Chiropractic in California," a study carried out by the Stanford Research Institute²⁴ and "Chiropraxy," a report of the Quebec Royal Commission on Chiropraxy and Osteopathy.²⁵

Conclusions

The inclusion of chiropractic in any health-care program, public or private, is not in the public interest. There is no reason to believe that further studies of chiropractic would bring forth new facts to negate the findings previously published by knowledgeable investigators of unquestionable integrity. Concerned citizens need guidance as they attempt to evaluate the claims and counterclaims of the worth of chiropractic services. The scientific and medical communities have a moral obligation to take a position on this important problem and inform the public of it.

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Urological Complications in 216 Human Recipients of Renal Transplants

T. E. Starzl et al (4200 E Ninth Ave, Denver)
Ann Surg 172:1-22 (July) 1970

The techniques used to re-establish urinary tract drainage of 234 kidneys which were transplanted to 216 recipients, from one to 7½ years ago are described. The original reconstructions were with ureteroneocystostomy, ureteroureterostomy, and ureteropyelostomy. Serious urologic complications including urinary fistula, obstruction, and hemorrhage occurred at approximately a 10% incidence after both primary ureteroneocystostomy and primary ureteroureterostomy.

There was a high mortality from complications occurring during the first six posttransplantation weeks, but thereafter urologic complications were not fatal. Both early and late urologic complications were preferably treated by ureteroureterostomy or ureteropyelostomy. Ureteroneocystostomy is recommended in most cases of transplantation as the operation of choice for initial urinary tract reconstruction. Although it does not have a materially lower complication rate, it does not involve the unnecessary sacrifice of either host or homograft ureter, thereby keeping all avenues open for secondary repair.

Tuberculous Cavitating Node Communicating With the Trachea. Case Report With Radiographic and Pathologic Review.

E. J. Palacios, M.D.,* Robert M. Tirman, M.D.,** Harold J. White, M.D.***

ABSTRACT—A case is reported of a patient with an unusual radiographic finding in the chest. This consisted of an air-fluid level in a nodal mediastinal mass, shown later by autopsy to be secondary to penetration of a caseous lymph node into the trachea. Other findings of interest were the large masses in the liver and spleen, which grossly simulated a neoplastic process, but proved on histological examination to be granulomatous.

INDEX TERMS: Tuberculosis, mediastinal lymph node, cavitating. Trachea. Liver. Spleen. Lymph node

The incidence of many infectious diseases has decreased as a consequence of medical progress with refinement of diagnostic tools, physician training and more effective treatment, as well as a general improvement in economy and housing conditions. Tuberculosis is still a prevalent and dreadful disease, although it occurs with less frequency than in the past. Because of its diminished occurrence we are less likely to consider this entity in the differential diagnosis of mediastinal lesions, as well as in various types of extra-thoracic disease. Moreover, tuberculosis may imitate neoplastic, as well as inflammatory processes. To compound the difficulty, extra-pulmonary tuberculosis is frequently found in the absence of lung lesions, although probably a sequel to the primary infection. The following case report exemplifies this point.

CASE REPORT

H. G. Y., a 76-year-old, white male, had multiple admissions to the Little Rock Veterans Administration Hospital for conditions unrelated to the cause of death. The patient was a known alcoholic and a heavy smoker. In April 1970, he was brought to the hospital by the police who found him wandering the streets completely disoriented. Admission chest radiographs (4/6/70) were reported (Fig. 1) as showing diffuse fibrotic changes in the lungs, with a pneumonic infiltrate in the right lower lobe posteriorly. Both costo-

phrenic angles were blunted, consistent with either minimal pleural effusion, or old inflammatory change. The minor fissure was thickened. Residuals of previous granulomatous disease were hilar calcifications, present bilaterally, and a prominent right paratracheal nodal mass density. The latter was thought at first to contain calcium. Later films showed this to represent small calcifications in the lung superimposed on the paratracheal nodal density.

The pleural fluid aspirated was described as slightly cloudy and straw colored. It showed a specific gravity of 1.008, a total cell count of 4300, of which 90 per cent were lymphocytes, sugar was 120 mg. per 100 ml., and protein was 3 grams. Cultures and cytological examination rendered no definitive clues. Repeated search for acid fast organisms was negative in the pleural fluid, as well as in his sputum. *Klebsiella-Aerobacter* was isolated from the latter. PPD and histoplasmin skin tests were negative. The patient had an unexplained leucocytosis (16,800 per cu mm).

He was started on Penicillin, and was afebrile

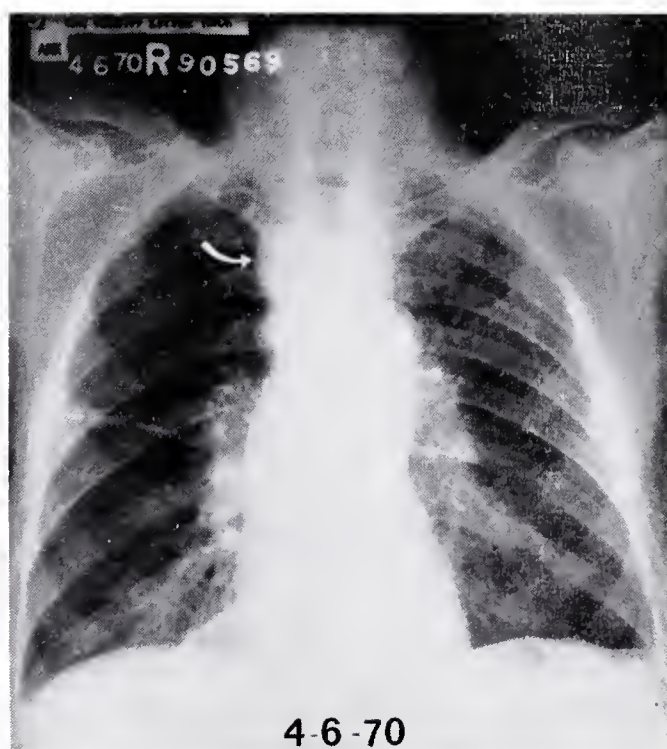


Figure 1.
Posterior-anterior view of chest showing large paratracheal node (arrow) and fibrotic changes in both lungs.

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TUBERCULOUS CAVITATING NODE COMMUNICATING WITH THE TRACHEA
CASE REPORT WITH RADIOGRAPHIC AND PATHOLOGIC REVIEW

throughout his entire hospital course. A repeat chest roentgenogram on the 18th hospital day (Fig. 2a and 2b), showed an air fluid level in the right paratracheal lymph node. This was thought to be secondary to necrosis and communication with a bronchus.¹ In the lateral view, the air fluid level is visualized anterior to the esophagus. The differential diagnosis considered by the radiologist included neoplasm and also included necrotic infarct in the medial right upper lobe which resembled a paratracheal node.

On the 19th hospital day the patient became hypotensive, with low central venous pressure. Later, he was considered to be in congestive failure and developed acute pulmonary edema, expiring on the 21st hospital day.

Postmortem examination disclosed multiple soft, enlarged, peripancreatic, porta hepatis, mesenteric, left supraclavicular, and right paratracheal lymph nodes. The latter was cavitated, and communicated directly with the trachea (Fig. 3). This communication apparently was established sometime between the days in which the radiographic studies of the chest were performed. The liver was firmly adherent to the diaphragm and contained multiple soft, umbilicated, grayish white nodules, protruding over the outer surface of the organ (Fig. 4). These nodules were irregular in shape, their size varying from a few millimeters to several centimeters. Similar lesions were present on the cut surface of the spleen. The gross appearance very closely simulated

metastatic carcinoma. In all these areas we found caseous granulomas produced by mycobacterium tuberculosis, human type. The immediate cause of death was massive bilateral pulmonary infarcts secondary to phlebothrombosis of the lower extremities.

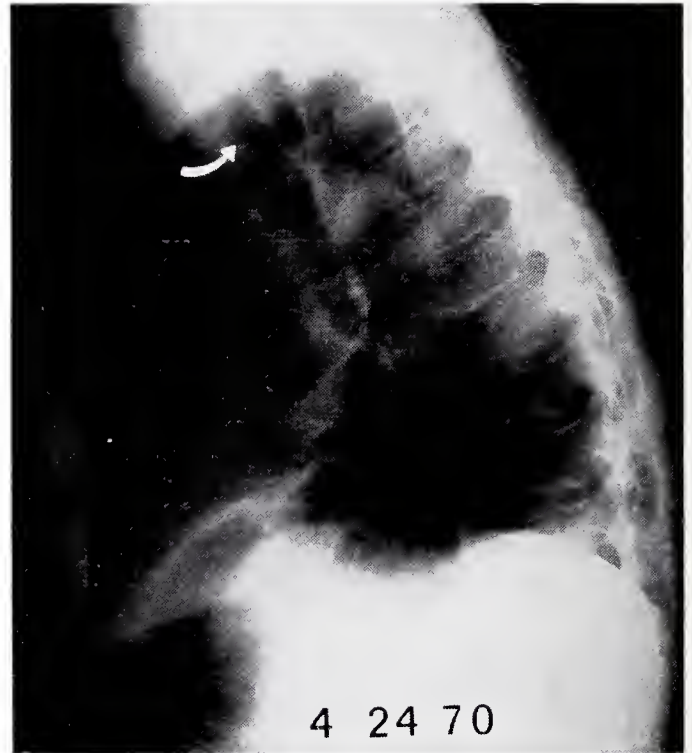


Figure 2b.
Right lateral view showing the air fluid lever (arrow), depicted in Figure 2a.

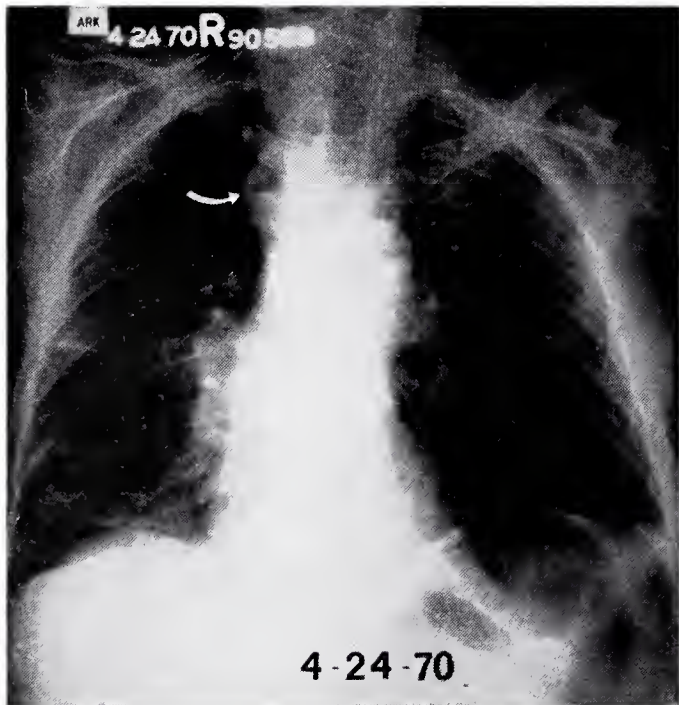


Figure 2a.

Mass density in right half of mediastinum containing air and fluid, due to necrosis and communication with trachea (arrow).



Figure 3.

Arrow points to necrotic cavity in enlarged lymph node, adjacent to and communicating with trachea. Another necrotic, large, paratracheal node is also visible directly below.

DISCUSSION

Extra-pulmonary tuberculosis is now much less common in the United States, due to the marked reduction in the presence of human infection, the virtual eradication of bovine disease, and the effectiveness of chemotherapy in preventing extra-pulmonary dissemination. Once extra-pulmonary disease has developed, early diagnosis becomes the key to successful therapy. Tuberculous lymphadenitis has been reported to be the major form of extra-pulmonary disease seen in the U. S. Navy.² In their experience, laboratory studies were of little diagnostic aid and chest roentgenograms were normal in 39 per cent of cases.

It is accepted by most people that tuberculous infection has three phases (Table 1). The primary lesion is most frequently seen in the lower half of the lower lobe, just beneath the pleura; rarely is it observed in the apical portion.³ The primary complex is followed by a stage of lympho-hematogenous dissemination which may result in tuberculosis of any of the tissues of the body. The infection in the lymph nodes, whether a part of the primary complex or a part of the post-primary condition, may heal without producing any obvious clinical expression and later show calcification. The process may lay quiescent for months or years to become active whenever

the resistance of the host is impaired. This was probably the sequence in this patient. Tuberculosis and alcoholism are frequently in close partnership. Patients with chronic alcoholism in general exhibit a lower reactivity to intradermal tuberculin. A negative skin test does not rule out tuberculosis if the patient is a chronic alcoholic. When enlarged lymph nodes are found in areas surgically accessible, a biopsy of one of them is of great value. The diagnosis of tuberculous lymphadenopathy can be made with certainty only by the isolation of mycobacterium tuberculosis from the involved node or from the secretion draining from it.

Over-reliance on the old concept of exudates and transudates can be deceptive at times. In this patient the protein content was of no value in that respect and the specific gravity was that of a transudate. The most useful information was obtained from the cell count. A leucocyte count of 1000 per cu. mm. suggests inflammation (septic or nonseptic). However, for unknown reasons about 5 to 10 per cent of effusions due to congestive heart failure or liver disease have high leukocyte counts or numerous neutrophils. In tuberculous effusions lymphocytes and mesothelial cells usually predominate. Lymphocytes also may be seen in lymphomas, lymphatic leukemia, mycotic disease, and some chronic bacterial infection.

When the laboratory can offer no, or little, support in making a definitive diagnosis of tuberculosis, the clinician must rely on clinical data and judgement to reach a conclusion. The importance of a carefully taken history and a meticulously performed physical examination cannot be overemphasized. The spectre of tuberculosis continues to haunt the human body and can be apprehended and treated early only by keeping a high index of suspicion when faced with a disease of obscure etiology.

TABLE 1: PHASES OF TUBERCULOUS INFECTION
I. Primary complex
Anatomic healing (most cases)
Rapid pathologic progression (small number of cases)
II. Hematogenous dissemination
Early generalization (early life)*
Late generalization (adult life)
III. Chronic pulmonary tuberculosis
*Two pathways: abortive (innocuous in great majority of cases; or progressive)



Figure 4.
A portion of the liver showing the gross appearance of its outer surface studded with necrotic grayish white irregular nodules.

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Nasopharyngeal Fibroma

(Report of a Case)

Edgar A. Gedosh, M.D.*

Nasopharyngeal fibroma is an unusual tumor. It usually arises in young males and presents as an epistaxis or a nasal obstruction. It is usually benign and, theoretically, will regress with the onset of adulthood; but, because of bleeding episodes, it warrants removal. Because of the potential hazard of bleeding at removal, certain modalities of preoperative treatment have been advocated.

The patient is a 16-year-old, white male who was seen on March 22, 1971 at Sparks Regional Medical Center Emergency Room with a history of right-sided epistaxis. He was treated at that time with some NeoSynephrine Nose Drops and then seen in the office. At that time, a suspect area on the septum was cauterized with Silver Nitrate.

He was next seen on September 13, 1971 with a right-sided epistaxis. The nose was anesthetized and a prominent area on Kiesselbach's plexus was cauterized. Further examination revealed a lesion in the posterior nasal cavity and anterior nasopharynx which was visualized by indirect nasopharyngoscopy and directly with anterior rhinoscopy with a microscope. A right carotid arteriogram was then performed and a vascular lesion was noted involving the right posterior nasal cavity and anterior lateral nasopharynx and medial aspect of the infratemporal fossa. The blood supply to this was by the external carotid via the internal maxillary artery.

He was seen September 20, 1971 by the radiotherapist and treatment with Cobalt 60 was begun to the right and left lateral nasopharyngeal walls with fields of 6 x 6 centimeter. Ten treatments of approximately 200 rads over a 12-day calendar period for a total of 2,000 rads to the nasopharynx were carried out.

He continued to have intermittent epistaxis but not severe.

On September 27, 1971, he had three different bleeding episodes and was given Adrenalin on

that particular day. This was the last bleeding he had.

On October 12, 1971, he began 5 mg. of Stilbestrol and took this for two weeks, 5 mg. a day.

On October 27, 1971, he underwent surgery at Sparks Regional Medical Center. He had a temporary right external carotid artery ligation and a palatal flap was turned with the resection and neurosurgical clipping of the right palatal artery. He had removal of the right posterior one-half of the hard palate and left posterior one-fifth with a portion of the posterior aspect of the vomer for further exposure. The tumor was then removed subperiosteally. The tumor itself was not a hemostatic problem, but the external carotid artery ligature was tightened at that time and intermittently loosened to check for blood flow to the tumor. The tumor from the nasal cavity had a broad base from the lateral wall and from the superior wall posteriorly, as well as the basisphenoid, and a very broad base in the nasopharynx. By getting under the periosteum, the tumor was elevated out and removed. It was necessary to break the tumor in two as it extended back into the infratemporal fossa. This did not cause marked bleeding. The lateral extension was elevated and pulled out of the medial aspect of the infratemporal fossa space and scraped off the pterygoid musculature. This seemed to come out clean. The free edges were cauterized and the field was dry when surgery was finished. After loosening the external carotid ligature, no further bleeding was noted. The estimated blood loss was about 150 to 200 cc. of blood. Most of this, however, was lost from skin incisions and raising the flap. The nose was packed with anterior nasal Vaseline gauze and removed on the fifth day. He took clear liquids for two days and then had a soft diet. He went home on the third day.

He has done very well one week post-operatively.

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Summary

Here we have seen many aspects of this disease considered to be typical for this entity. Namely, a young male who presents with epistaxis of a recurring, but relatively mild, nature with nasal obstruction. The tumor was not biopsied previous to surgery because of the suspect vascular nature of the lesion and this was corroborated by an angiogram. He was treated pre-operatively with radiation and hormones in an effort to cause an increase in fibrosis of the stroma and endothelial obliteration of the vasculature. This apparently was obtained to a high degree because of the relative paucity of bleeding on tumor traumatization at surgery. A palatal flap was used and a very good exposure was obtained. It was necessary to ligate a palatal vessel; but there was no danger of a palatal necrosis appearing,

because one can cut both arteries and enough blood supply from the lateral pharyngeal wall vasculature will support a viable flap. A subperiosteal approach was utilized and this would appear to enhance removal and decrease the bleeding. With this approach one can remove an extension into the infratemporal fossa. The bleeding present in this case is considered less than noted in a series of cases where from 2 to 4 units ordinarily is lost.

I would hesitate to omit the preparatory step of safety ligature of the main blood supply to the tumor which, fortunately, is usually the internal maxillary artery via the external carotid.

The follow-up of this case, however, will be necessary because of the possibility of tumor rising in another area or recurring due to incomplete removal.



Arkansas Chiropractors Making Political-Legislative Progress

Arkansas Chiropractors, in the March-April issue of "Digest of Chiropractic Economics" call attention to their recent legislative accomplishments and cite their "endeavor to overcome legislative inertia and insurance company indifference". The article is quoted in part as follows:

"Honoring our annual awards banquet was Mr. Ray Thornton, Attorney General of the State of Arkansas. Mr. Thornton was also our feature speaker at the banquet where Dr. Sturgis Miller presided as master of ceremony.

"Arkansas chiropractors through the persistent effort of their state association, have rolled up a formidable record of accomplishment from February 1971 to February 1972. For example:

"Insurance Equality Law; a new modern Chiropractic Law; Blue Cross & Blue Shield incorporated chiropractic into its insurance program; chiropractic inclusion into our State Welfare and Medicaid program; Chiropractic inclusion into our State Employee Insurance program.

"We are now formulating plans of action that will promote the inclusion of chiropractic service when labor unions update and renew their contracts.

"It is unfortunate when we list our accomplishments, that time and space does not afford naming all the good doctors of our association and their friends who played a part in the great effort that was necessary to bring these desired attainments. One name, however, must be mentioned, Dr. Ottis H. Hiers. Dr. Hiers played the dominant role in our association's efforts to carry through the forementioned record of achievement. For those readers who are presently engaged in a similar endeavor to overcome legislative inertia and insurance company indifference, you may well appreciate the numerous out-of-office hours that must be spent to keep your programs moving. The chiropractic profession of Arkansas owes Dr. Hiers and the association members who worked with him a resounding vote of THANKS."

Radiographic Diagnosis of Periapillary Carcinomas

Clinical Features

Keith Hackler, M.D.*

Periapillary carcinomas are defined as those which arise in the ampulla of Vater, the distal common bile duct, the head of the pancreas, or in the duodenum. The relative incidence of these tumors in a review of 72 patients is carcinoma of the head of the pancreas in 70 per cent, the ampulla of Vater in 15 per cent, the distal common bile duct in 15 per cent, and the duodenum in 3 per cent.¹

In a series reported by Warren,⁷ et. al., of 243 patients with periapillary carcinomas, males and females had an equal incidence of duodenal and common bile duct cancers. Male by a ratio of 3 to 1 had more carcinoma of the ampulla of Vater and head of the pancreas. Carcinoma of the ampulla and the head of the pancreas had an average age of onset of 56 years whereas duodenal and common bile duct cancers occurred at an average age of 52.

The common symptoms of periapillary carcinomas consist of pain, jaundice, weight loss, and occult blood in the stool.⁷

A correct early diagnosis is always essential if possible, especially when dealing with small localized periapillary cancers. If early diagnosis of small lesions can be made, especially in those lesions not originating in the pancreas, effective surgical treatment is available. Patients with the non-pancreatic carcinomas have a better 5 year survival after a Whipple procedure, according to Warren.

SITE	FIVE YEAR SURVIVORS FROM 243 PATIENTS	
	NUMBER	PERCENT
HEAD OF PANCREAS	9	12.5
AMPULLA	20	29.8
DISTAL BILE DUCT	5	35.7
DUODENUM	7	41.2

Anatomy

In order to interpret the radiographic signs to be described, a knowledge of the anatomy of the area is essential.

The duodenal papilla is a mucosal elevation

on the medial posterior side of the second part of the duodenum. It is formed by the ampulla of Vater and parts of the distal common bile duct and pancreatic ducts. The most distal part of the common bile duct is intramural in the duodenal wall. Above the major papilla is a prominent valvulus, and above and below the major papilla is an extension of the plica longitudinalis which is the only longitudinal fold of the duodenum.⁵ (Fig. 1).

The usually elliptical papilla lies in the longitudinal axis of the duodenum, and measures 1.5 cm. in length, 0.5 cm. in width, and 0.2 cm. in profile.⁵

The ampulla of Vater is a duct representing the combined distal ends of the common bile duct and pancreatic duct. These two ducts run side by side in the wall of the duodenum for a distance of about 15mm causing slight indentation of the mucosal side of the duodenum.⁵ About 60 per cent of subjects have an ampulla; in 30 per cent the ducts open separately on the papilla, and in about 5 per cent the pancreatic duct opens on the minor papilla. The average dimensions of the ampulla are: length 3mm, width 2mm. The distal common bile duct before entry into the wall of the duodenum averages 10mm in diameter; after entering the wall of the duodenum, 5mm.

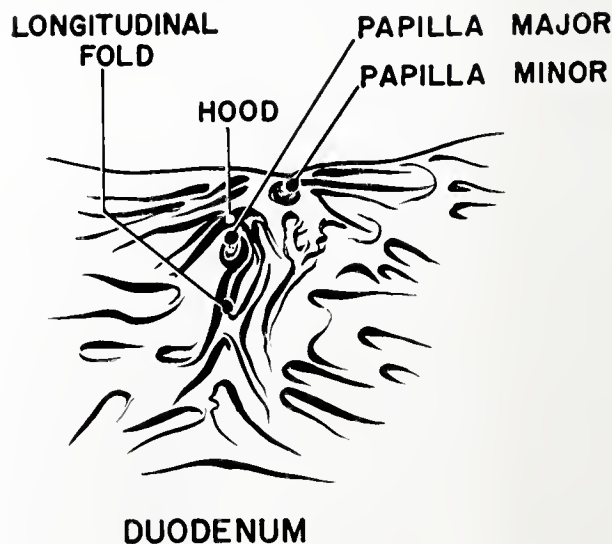


Figure 1.
Diagram of normal anatomy of the duodenum

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The sphincter of Oddi is composed of three more or less distinct sets of smooth muscle fibers surrounding the intraduodenal portion of the pancreatic duct, the common bile duct, and the ampulla of Vater.

Significant congenital variants of the duodenal papilla for this discussion are those of position and number. It may lie within any distance from 60 to 140mm from the pylorus, but is nearly always on the medial side of the duodenum, either slightly anteriorly, or more often posteriorly. Where the common bile duct enters the duodenum there is a corresponding papilla; the single duct will give rise to a single papilla. The common duct rarely may bifurcate or two entirely separate ducts may enter the duodenum giving rise to multiple papillae.⁵

Method of Study

CONVENTIONAL UPPER G.I. SERIES.

The major papilla is visualized frequently using no unusual maneuvers. The ampulla of Vater is seen 1 in 500 to 1 in 1000 times. The major papilla is visible about half the time.⁵

A SMALL SURVEY AT THIS INSTITUTION REVEALED THE FOLLOWING:

NUMBER OF CASES	42
PAPILLA VISUALIZED	19
PER CENT VISUALIZATION	45%

Conventional barium study of the upper G.I. tract has an accuracy of 50 to 60 per cent in patients subsequently proven to have pancreatic carcinoma. An upper G.I. series may also pick up other diseases that mimic peri-vaterian lesions. In a study by Eaton, et. al., in 44 patients with mixed pancreatic and peri-vaterian lesions, conventional upper G.I. series had a correct diagnosis rate of perivaterian cancer of about 55 per cent,³ but has a very significant false negative rate.

HYPOTONIC DUODENOGRAPHY. This method is for practical purposes a barium study of the upper G.I. tract in much the same manner as a conventional upper G.I. series. The significant addition is rendering the duodenum hypotonic so that it is fully dilated and aperistaltic. In this state filling defects and mucosal alterations originating intrinsically or extrinsically to the duodenum are better seen. Usually 60 mg. Probanthine IM will cause a brief period of hypotonicity. The procedure should not be per-

formed in patients with glaucoma, tendency to urinary retention, or patients with heart block and other cardiac problems.

The high rate of false negative diagnosis on conventional study should be reducible. In one series² the false negative rate for peri-ampullary carcinomas seen on hypotonic study was about 25 per cent which is an improvement compared to conventional upper G.I. study. The accuracy of hypotonic duodenography in detecting malignant pancreaticoduodenal disease varies from 72 to 96 per cent, as opposed to conventional study with a 19 to 74 per cent range.²

In our survey of 37 hypotonic duodenographies using the major papilla as the point of interest, the following data was obtained:

NUMBER OF CASES	37
PAPILLA VISUALIZED	22
PER CENT VISUALIZATION	59%

It is seen that with hypotonic duodenography there is an apparent increase in the per cent visualization of the major papilla. When the simultaneous studies were compared there is a stronger suggestion that when the conventional study was negative, the hypotonic study was positive for visualizing the filling defect created by the major papilla, and vice versa. (Fig. 2).

DIAGNOSTIC SIGNS IN CONVENTIONAL UPPER G.I. SERIES AND HYPOTONIC STUDY. It would appear that conventional and hypotonic studies give similar information but that some findings are more pronounced with



Figure 2.

Normal duodenum
A. Suspected pancreatic carcinoma in conventional upper G.I., showing narrowed, effaced descending duodenum.



B. Hypotonic study, perfectly normal, (same patient as A) disproving the radiographic diagnosis in A.

the hypotonic study. When examining the perivaterian area one must specifically look for the following on fluoroscopy:⁵

1. Position of the major papilla
2. Size of the major papilla
3. Visualization of the ampulla
4. Shape of the major papilla
5. Distortion, flexibility, distensibility of peripapillary mucosa
6. Peristalsis of the duodenum
7. Calibre of the duodenum
8. Mobility of the duodenum
9. Presence of duodenal diverticula
10. Presence of a mass fluoroscopically
11. Retrogastric and retroduodenal soft tissue

Eaton suggests the following criteria in evaluating hypotonic studies:

- 1) Spiculation which consists of fine or coarse serration along the inner wall of the duodenum. This is seen in carcinomas and pancreatitis.
- 2) Straightening with fold effacement. The inner border of the duodenum is flat and the normal fold pattern is absent with the disappearance of the regularly spaced valvulae. There may be slight reduction in the duodenal calibre. These signs are commonly seen with pancreatitis.
- 3) Nodularity or mass indentation, indicating either benign or malignant lesions.
- 4) Thickened folds, usually indicating benign inflammatory problems and usually involving medial and lateral duodenal walls.
- 5) Miscellaneous: ulceration, Frostberg sign, barium reflux into the common duct.

These signs are also very pertinent in conventional upper G.I. Study.

Interpretation of roentgen findings of perivaterian neoplasm depends heavily on demonstration of filling defects around the duodenal loop and excluding benign processes that might mimic neoplasia. Filling defects may result from impacted stones, pancreatitis, benign tumors, malignant tumors other than those under consideration, duodenal diverticula, blood clots, prominent mucosal folds, mucosal and papillary edema, infections, ectopic pancreatic tissue, and congenital abnormalities. A word of caution must be interjected as regards retrograde filling of the ampulla of Vater, bile duct, or pancreatic duct. This is sometimes of no significance, but does occur as a result of local malignancy, recent passage of stones, or secondary to drug effect or to surgery.⁵

Differential Diagnosis

It should be emphasized that at times carcinoma of the common bile duct, the ampulla, the head of the pancreas, and the duodenum are indistinguishable from each other clinically, radiologically, and pathologically. They will now be presented roughly in order of their apparent curability rather than their occurrence.

Duodenal carcinomas are relatively rare. Sixty-five per cent occur in the second part of the duodenum and if located near the papilla may cause early jaundice. Eccentrically located duodenal carcinomas may become known only for symptoms of anemia or duodenal obstruction. Usually this carcinoma ulcerates at some point in its course and virtually 100 per cent of patients have occult blood in the stool. On x-ray examination there is a filling defect of varying size usually showing extensive mucosal destruction. Later changes are fixation in the surrounding mucosa and duodenum, rigidity, and obstruction.⁴

Carcinoma of the distal common bile duct is rare and presents because of jaundice. Its relation to the duodenal papilla may cause enlargement of that structure. On upper G.I. study the concave inner side of the duodenum may show a filling defect secondary to the growth itself or to a dilated common duct.⁵

Carcinoma of the duodenal papilla and ampulla of Vater is also rare, occurring in .07 per cent of 18,000 autopsies. Its presenting symptom is jaundice, because of its critical location. It is

commonly detected while only about 2 to 3 cm. in diameter because of early onset of jaundice. (Less than 20 per cent of these tumors metastasize.) On G.I. examination the filling defect is often rounded and smooth with intact mucosa. Larger exophytic tumors are typically irregular, may show mucosal destruction and ulceration, and can exhibit a double contoured duodenal lumen. Infiltrative tumors show primarily mucosal destruction and rigidity of the duodenal wall. There may be pressure changes on the bowel from the gallbladder and dilated common bile duct.^{4,6}

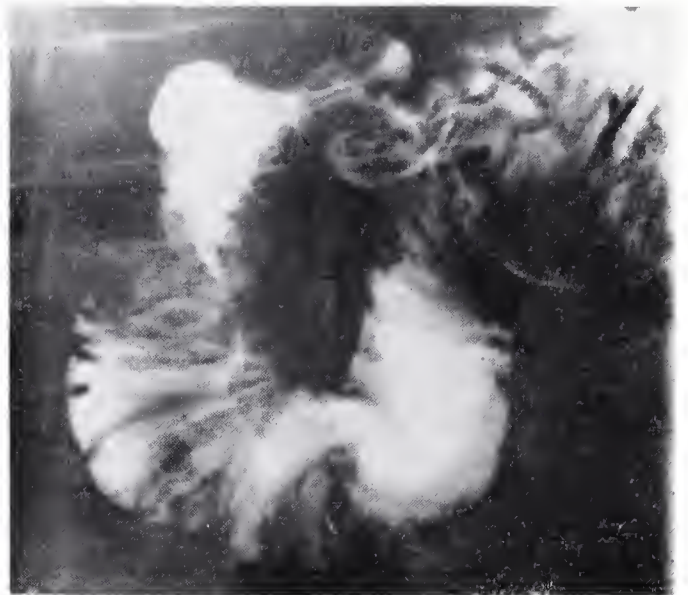
Carcinoma of the pancreas is the commonest malignancy in the duodenal area. Clinically pain, jaundice, and weight loss are its presenting symptoms. Occult blood in the stool is not the hallmark of pancreatic carcinoma, but does occur late in the disease. Early roentgen findings on upper G.I. examination are edematous swelling of the major papilla, and later pressure changes causing flattening or effacement of the mucosa. Abnormal peristalsis, localized indentation on the lesser curvature, and the inverted "3" sign are also seen. Very late changes consist of spreading of the duodenal loop, fixation of duodenum, mucosal thickening, mucosal destruction, perforation, and fistula formation.⁵ Fig. 3



Figure 3.

Carcinoma of head of pancreas

A. Conventional study with minimal spiculation on medial side of upper part of descending duodenum.



B. Double contour effacement and gross mucosal spiculation in upper duodenum.

Malignancy of regional lymph nodes and secondary invasion of the duodenum can occur as a result of nearly any intra-abdominal neoplasm, including the lymphomas and Hodgkin's disease. If the regional nodes are involved, multiple scalloped smooth indentations are found along the inner loop of the duodenum. The mucosa may be compressed, but is rarely involved.⁵

Barium Study of Commonly Misinterpreted Benign Processes

These benign findings may often be misinterpreted as being neoplastic and are included for differential diagnosis.

Congenitally large duodenal papillae occur and some have been measured as large as 3.0 x 1.2 cm. All other roentgen, clinical and laboratory studies are normal.

Heterotopic pancreatic tissue may cause filling defects. These may be single or multiple and are located anywhere in the duodenum. The overlying mucosa may be coarse but is normal otherwise. About 50 per cent of the time a so-called ostium can be demonstrated in the mass of the ectopic tissue.⁵

Duodenal diverticula are commonly seen and can be the source of some confusion. They and bowel duplications can produce filling defects, mimic perforations, or actually be the source of active disease processes.⁴

Edematous swelling of the major papilla occurs in inflammatory lesions of the pancreas, bile ducts, in pancreatitis, cholecystitis, and in the

presence of calculi in the common duct. After repeated bouts of inflammation adenomatous hyperplasia may occur and lead to a more permanent mass defect. On roentgen examination the manifestations of the underlying disease may be demonstrated, but the duodenum itself is usually intrinsically normal.⁵

Pancreatitis produces changes extrinsic to the duodenum that may be confused with perivaterian neoplasm. In acute pancreatitis the duodenal mucosa is edematous and there may be increased peristaltic activity and irritability. Fig. 4. Later in the course of the disease the duodenum may become hypotonic. In about 20 per cent of patients the duodenal papilla will be swollen on roentgen examination. Also occurring later will be pressure changes around the duodenal loop secondary to enlargement of the pancreas. Plain films alone may show calcifications in the pancreatic area.

Chronic pancreatitis will often cause concretions in the pancreatic area. Some evidence of chronic pancreatitis can be seen in 75 per cent of individuals affected. Among the most frequent changes that occur are those located in the second part of the duodenum and are the following: 1) Impressions on the lesser curvature of the duodenum, 2) Displacement of the lesser curvature toward the right, 3) the reversed "3" sign, 4) An enlarged papilla, 5) Adhesive changes causing irregular stretching of the medial wall of the duodenum. Occasionally diverticula

are formed secondary to adhesions. Also seen is the double contour sign.⁶

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Isometric Contraction Period of Left Ventricle in Acute Myocardial Infarction

K. Inoue, et al (750 E Adams St, Syracuse, NY 13210)

Circulation 42:79-90 (July) 1970

The usefulness of nontraumatic methods for measuring left ventricular isometric contraction period in myocardial infarction have been evaluated. The isometric contraction period was obtained in 13 normal subjects and 39 patients admitted to a coronary care unit with chest pain, including 18 cases of acute myocardial infarction, 12 of old myocardial infarction, and 9 with chest pain of miscellaneous origin. This period was measured by three methods. The time interval between the onset of systolic wave of apex cardiogram and the beginning of upstroke of carotid pulse tracing was best in demonstrating statistically significant differences between the normal group and the three groups of patients. Likewise, acute coronary ligation in seven dogs produced characteristic changes in this interval, which was associated with a reduction in the left ventricular stroke volume and dp/dt, and the aortic flow velocity. The isometric contraction period obtained by this method appears to be of value in the bedside evaluation of acute myocardial infarction.

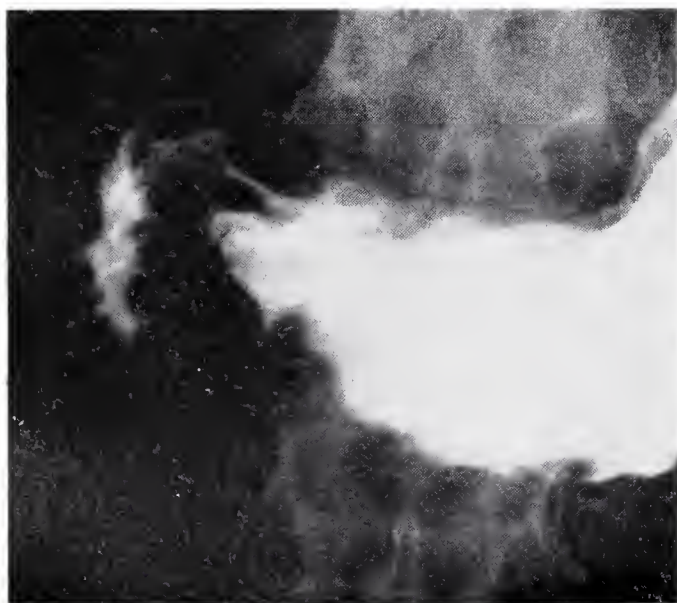


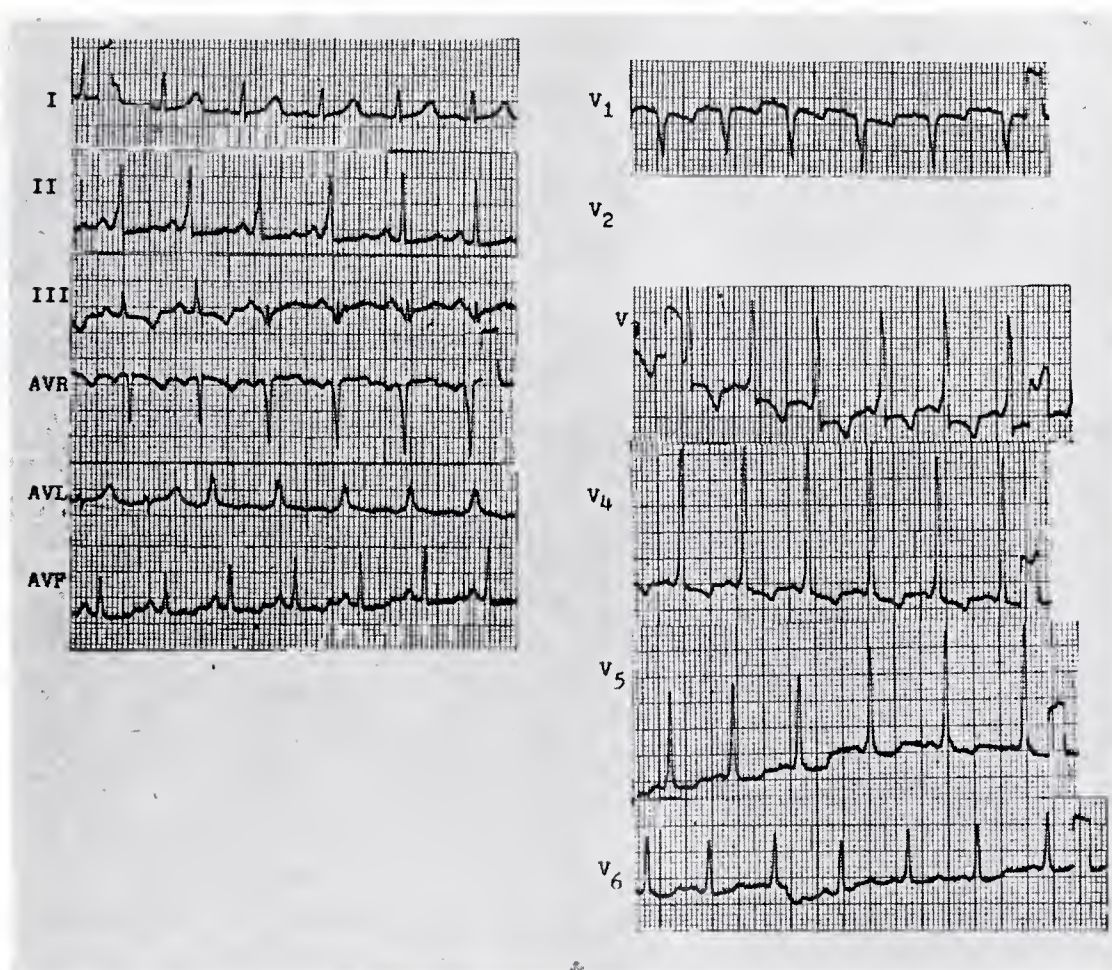
Figure 4.

Acute pancreatitis
Conventional study showing thickened duodenal folds and spasm of the duodenum.



This is a 32-year-old black female with Carcinoma of the Cervix.

See answer on page 429



The Department of Cardiology, University of Arkansas Medical Center
John E. Douglas, M.D.



EDITORIAL

"The Meddlesome Government Syndrome"

Alfred Kahn, Jr., M.D.

The Hexachlorophene case is a typical example of bungling government bureaucracy. The faulty handling in this instance was dramatic because the banning of the use of the drug resulted in an immediate outbreak of epidemics of skin infection in the newborn. This chain of events has been well publicized in the press — Americans are very alert to threats to Motherhood, babies, and for that matter, apple pie.

The significance of the hexachlorophene case is really not so much the case itself, even though it is worthy, as the fact that it represents a posture and attitude of the government. It is an extension of "the daddy knows best attitude" more elegantly phrased as paternalism. It is a philosophy of the all encompassing government with a bureaucratic tenacle extending into every walk of life. The U. S. A. was founded on the philosophy of giving the greatest possible individual freedom, as long as that exercise of freedom does not diminish someone else's freedom or create injury.

The extension of this idea certainly means that there have to be laws and regulatory bodies in government, but it also has been our heritage to expect minimal control consistent with good function and not maximum control. Organized medicine is a better setting for drug investigation and control than the federal government, with the exceptions of narcotics, regulation of drug impurities, etc. Almost any chemical substance improperly used can injure life: water intoxication, excess sodium retention, sugar in diabetes. These examples are the ludicrous extremes, but they make a point that the proper control of a

drug is best judged by well-informed physicians who know the needs of the patient, the character of the disorder, and the potential danger of the drug to be used. Many potentially very harmful substances are used if the physician judges that his patient requires it as lithium chloramphenicol, narcotics, etc., to name a few.

In balance, it should be apparent that no regulation is perhaps even more harmful than over-regulation, and the thrust of these comments are for more sensible regulation, not anarchy or non-regulation. One abrasive area of conflict between private industry and government is the matter of using generic names, and in this instance the writer would prefer to see drugs called by the manufacturer's name plus the generic name rather than the meaningless trade names sometimes employed. In short, Smith's Penicillin is a far more understandable drug name than Smithocillin or some other neologism. Physicians duplicate drug prescriptions and ignore the possibility of using a better drug because they do not recognize it from the trade name.

Government interference in medical affairs is not simply limited to the use of drugs. It affects many areas. The government has recently virtually singled out physicians as a prime mover in our current inflation; this is a real misrepresentation of fact. This inflation is disastrous, but the high cost of medical care is not due to increased physicians' fee, but to the high cost of hospital services and basic medical supplies as x-ray films, drugs, etc. The physicians' fees reflect the state of the economy; they do not set the economic pace. When times are hard, phy-

sicians' fees are low and still difficult to collect; in prosperous times, physicians' fees are in accord with the economic state, but the point is that no manipulation of physicians' fees significantly influences the economy in the U. S. A. — and about all that one can conclude when this profession is almost singled out is that it is for political purposes. The high cost of hospitalization reflects two general categories: first of all, goods and services are very expensive in the current market. Secondly, hospitals need competitions in order to stay "lean." Too much competition means an oversupply of expensive hospital beds; too little competition does not give the public a hand in reducing hospital costs through selec-

tion of the hospital that best suits their budget and medical needs.

The implication of the title, "The Meddlesome Government Syndrome" is clearly that good government is not a bureaucratic government with a finger in every pie. Bureaucracy brings bumbling as the hexachlorophene mess. In the context of the medical profession, good government implies enough freedom from undesirable restraint for organized medicine to solve its problems unless there is evidence of abuse or misdirection. Government agencies should consult with, and work with, organized medicine for the best interest of the public.



PUBLIC HEALTH AT A GLANCE

Tularemia

Most hunters have heard of the danger of a disease commonly called "rabbit fever." It is true that the disease is most often associated with the tularemia that is found in wild rabbits. However, tularemia may be found in the woodchuck, muskrat, opossum, skunk, squirrel and other species of wildlife.

Tularemia, in both man and animals, is caused by the bacterial agent, *Pasteurella tularensis*.* This organism is both adaptive and aggressive. One of the outstanding characteristics of tularemia is the ease with which infection takes place.

Tularemia is easily transmitted because of its infective nature coupled with the bacterial agent being widely dispersed in animal life. It is passed from animal to animal via blood-sucking ticks,

lice, flies, fleas and mites. The disease will infect humans through the bite of the wood tick, dog tick and the blood-sucking deer fly.

Humans become extremely ill upon encountering tularemia. A rapid onset is accompanied by chills, fever, headache, vomiting, body pain, sweating and prostration. Usually an ulcer will form on the skin at the infection site. Lymph nodes of the hands and arms become swollen and painful. Fever with tularemia is often high and may persist for several weeks at 102-104 degrees fahrenheit. The intestinal form of the disease is usually more severe, resembling typhoid fever symptoms. The recovery period of tularemia ranges from three to six weeks.

Although modern treatment is easier due to the availability of antibiotics, possibilities of prolonged illness and prostration suggest that prevention would be a better alternative. Untreated

*A new genus, *Francisella*, has been proposed for this species. Most scientists prefer to refer to the organism as *Francisella tularensis*.

ARKANSAS PUBLIC HEALTH AT A GLANCE

cases of tularemia result in death, therefore farmers, hunters, sportsmen and outdoor enthusiasts should practice six important precautionary measures. They are as follow:

1. Avoid animals which appear to be sluggish or slow moving. Dead animals brought in by pets should be suspects.
2. Wear rubber gloves when cleaning game. Do not rub eyes while cleaning game. All scratches, bites, cuts and punctures should be cleaned with disinfectant.
3. Game with white or yellow spots on the liver or viscera or having enlarged glands should be burned or buried.
4. Game should be cooked so no red juice will be found near the bone or in the meat.
5. Do not drink raw or untreated water. If so, boil it first.
6. De-tick clothing and all equipment. Remove ticks without breaking off the head. Do not mash ticks during removal. Clean and disinfect all insect bites.

Tularemia cases in Arkansas during 1970

11 - tick caused

5 - unknown



The Armed Services have conducted profound and laborious studies in the uses of biological agents in warfare. These studies are vitally important when there is reason to believe someone

else could use "germ warfare" against us. Tularemia was one of the most potentially devastating of diseases usable for such purposes, according to these studies.



THE MONTH IN WASHINGTON

The Senate Finance Committee has completed public hearings on the catch-all social security amendments bill (H.R. 1) and is expected to approve legislation soon containing important peer review changes in Medicare and Medicaid and a national catastrophic protection plan.

As approved by the House last spring, the bill was much the same as the one that went through the previous congress only to be stalled when there wasn't time at the end of the session to reconcile differences in the House and Senate versions.

The bill before the committee would:

- * Authorize health maintenance organization (HMO) experiments.
- * Extend Medicare to disabled social security beneficiaries; authorize experiments with peer review mechanisms.
- * Restrict physicians' fee increases to a cost-of-living index.
- * Give the HEW Department stronger policing powers over abuses.
- * Authorize experiments with prospective payments to institutions.

The committee appears certain to add two major provisions. One would institute a sweeping catastrophic protection plan for all Americans administered by social security; the other is the professional standards review organization (PSRO) plan under which groups of physicians including medical societies and foundations would have first opportunity to set up monitoring programs for Medicare and Medicaid in their areas.

In a statement filed with the Senate Finance Committee, the American Medical Association commented on a number of provisions of the proposed legislation. With respect to the catastrophic protection plan, the AMA advised against its adoption, saying: "We believe that catastrophic coverage, to achieve its purpose, must be tied in with adequate basic coverage in

order to afford the best range of protection." The Association recommended in its place that the basic and catastrophic provisions of its own Mediredit proposal be adopted by the Committee.

The Association supported provisions in H. R. 1 authorizing the Secretary to conduct experiments in community-wide peer review programs. It pointed to the many peer review activities presently ongoing, noting that under the experimental authority various programs, including those with professional standards review organization (PSRO) features, could receive necessary broad-scale experimentation. It stressed the need for further research and experimentation, cautioning against the adoption of a single nationwide program.

"If enacted," the AMA said, "PSRO would lock peer review into one single, untested, nationwide program, with unpredictable consequences. On the other hand, many valuable benefits can be gained through appropriate experimentation. H. R. 1 (prior to the PSRO amendment) provides authority to the Secretary of HEW to conduct such experiments in community wide peer review programs, and we believe it would be wise to implement this authority before any single overriding plan is adopted."

With respect to the Health Maintenance Organization (HMO) provision of the bill, the AMA statement noted that under separate legislation "an effort is underway to bring HMO's into existence without evidence of their economic justification or viability without continuing federal subsidy after being established." The AMA said that "before any such program is initiated nationwide and is held out as a realistic benefit available to beneficiaries under the Medicare program, it is our recommendation that cost and utilization data first be developed.

Besides the consideration of whether the HMO provision will in fact result in cost savings to the program, there is the paramount consideration of

the health care which will be provided to the beneficiary. We are not alone in expressing serious concern about a program which provides incentives to providers for lower utilization of benefits, and this aspect of the program — under-utilization — must be watched very closely so that the beneficiaries receive the best quality care. There are many additional questions to be resolved concerning the efficacy of this form of contract medicine. Moreover, it is important that the control and operation of the HMO be under the direction and supervision of physicians so that high quality care is provided. Operation of the health maintenance organizations under the direction of individuals or groups not competent in the health field should not be sanctioned."

The AMA statement also:

- * Opposed the proposed Medicare limits of 75 percent on prevailing charge levels, stating "we know of no such direct statutory limitations on prices, wages or charges in other private sectors of the economy."
- * Opposed as "unjustifiably repetitive" a further study of inclusion of chiropractic benefits under Medicare.
- * Said needy disabled should be covered under Medicaid rather than included in toto under Medicare and thus changing the concept of Medicare as a program for those over age 65.
- * Opposed any federal restrictions on drugs physicians may prescribe for patients covered under federal programs.
- * Urged the Committee to extend for five years maternal and child health programs of social security.

* * *

Sen. Edward Kennedy (D., Mass.) has promised the California Medical Association his Senate Health Subcommittee would not make public information contained in the working papers involved in the CMA's medical staff survey of hospitals. The senator said the papers would be treated as confidential documents and examined only under special committee rules at closed sessions.

However, Kennedy refused to grant the CMA's request at a one-day public hearing to exempt working papers from the scope of a Subcommittee subpoena for the final CMA medical staff reports and working papers on 45 California hos-

pitals most of which had been disapproved by the investigators.

CMA president Jean Crum, MD, told the Subcommittee "we believe that to subpoena work papers that include the personal impressions noted by the CMA surveyors, and sometimes the names of patients and physicians, could prove to be highly harmful to this important segment of the medical profession's comprehensive peer review activities."

There was no dispute over turning over to the Subcommittee the CMA's final reports.

Kennedy said the information was needed to allow the Subcommittee "to adequately fulfill its responsibility in drafting health maintenance organization legislation in respect to the quality of medical care."

The controversy, however, poses a larger issue than the immediate case of California.

A provision of the catch-all social security bill (H. R. 1) before the Senate Finance Committee establishes peer review organizations nationally under Medicare and Medicaid. Thus, the confidentiality of working peer review papers may become a problem that congress will have to settle.

Although Kennedy's decision to examine the papers only in closed sessions was a significant concession, the CMA still was compelled to turn over all of the information requested including the working papers, to the Subcommittee.

* * *

A cabinet-level department of health is slated to receive a serious push in congress this year, though time won't permit enactment. Rep. Paul Rogers (D., Fla.) influential chairman of the House Health Subcommittee, plans to introduce legislation and hold hearings.

Impetus to the drive could come from the Democratic Party's National Convention where a party plank provision may endorse the health department idea.

However, the Administration opposes the plan. President Nixon's moribund cabinet reorganization plan moves in the opposite direction, calling for the Health, Education and Welfare Department to be changed to a Department of Human Resources with added welfare programs from Labor and Agriculture Departments lumped in.

There is no question, however, from the standpoint of size and importance that health ranks a cabinet spot. Federal outlays for health next

fiscal year are put at \$25.5 billion, 10.3 percent of all federal expenditures. However, Administration supporters argue it makes no sense to contain within one umbrella most programs involving health and welfare as they are intimately connected and need single supervision. Education isn't quite so related, but there hasn't been much pressure to separate this function which ranks third in spending at HEW (about \$6 billion) and fits in as well at HEW as anywhere else.

Backers of a health department contend that health gets short changed because it doesn't have cabinet clout. Rogers argues that health is an administrative mishmash and that as a result the White House Office of Management and Budget is the real maker of health policy. "The federal health establishment is entitled to have a full-time secretary of health who can be heard in the White House over the guillotine of the Office of Management and Budget," Rogers declared in a speech last fall.

* * *

The legalized use of marijuana would appear a long way off despite reports showing growing support for "decriminalization." Only continued increase of marijuana smoking over a number of years and a new generation of lawmakers could bring about a climate for legalization, congressional experts predict. However, scaling penalties further down, especially for use, is a real possibility. The National Commission on Marijuana and Drug Abuse is reported ready to recommend dropping all criminal sanctions against private use, but this falls short of legalization. As sellers and importers would continue to be subject to criminal action.

The National Institute of Mental Health yearly report to congress on health aspects of marijuana found relatively little evidence of serious ill-effects with acute reactions apparently rare. Current information does not justify making marijuana legal, according to NIMH Director Bertram Brown, M.D., who nevertheless criticizes harsh penalties. Preliminary survey findings that chronic users of the drug in Greece and Jamaica appear to be healthy surprised the researchers. However, its effect on emotionally unstable teen-agers can be a serious retarding development, causing breakdowns.

* * *

The government has elevated alcoholism as a priority target with submission to congress of the first special report on alcohol and health. The report contains current information on the health consequences of using alcoholic beverages. No recommendations for legislative action are being submitted at present.

A \$200,000 radio-tv ad campaign has been started by the HEW Department to call the public's attention to warning signs of alcoholism and to discourage drinking to excess. Although the first efforts will be made in the public education field, the government's prime emphasis remains on rehabilitation and treatment.

The 120-page report summarized current scientific knowledge on the health consequences of using alcoholic beverages, and represents the first part of a three-year study being undertaken by the National Institute of Alcohol Abuse and Alcoholism to help the nation combat alcohol-related problems.

In the initial fact-finding phase, NIAAA established a consultant task force to gather and develop information, analyze existing literature and to identify those human health problems that are correlated with the use and abuse of alcohol.

Subsequent phases will design and test methodologies for assessing precisely and completely the ways alcohol affects selected areas of well-being, as well as identifying the most feasible methods for mounting effective prevention and treatment programs in the field of alcohol abuse and alcoholism.

The report said that alcohol is the most abused drug in the U.S., estimating that there are now 9 million alcoholics or problem drinkers in America — almost 10 percent of the work force.

* * *

The Coalition for Health Funding has stepped up its attack on the Administration's health budget, charging it falls \$2.7 billion short of "expansion of health services essential to solving the health crisis which the President himself warned about."

Officials of the Coalition, composed of 21 health organizations and interested lawmakers, have centered their attacks on the Administration's Office of Management and Budget and the congressional appropriating committees that often don't allot as much money as has been authorized.

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 11:00 A.M. on Sunday, March 26, 1972, at the Sheraton Hotel in Little Rock.

The following members of the Council were present: Long, Applegate, Watson, Shorey, Shuffield, Fairley, P. Gray, Edwards, Bell, Irwin, Burge, Duzan, Harris, Orr, Kolb, Kirby, Henry, Wilkins, Hyatt, Whittaker, Fowler, Verser.

Representatives of county societies in attendance were: W. A. Regnier, Ashley County; John Sneed and Charles Tucker, Baxter County; R. H. Langston, William A. Jones, Mahlon Maris, Boone County; Joe Rushton and Robert Hunter, Columbia County; H. B. White, Conway County; Gilbert D. Jay, III, Crittenden County; K. E. Beaton and Willard G. Burks, Cross County; John Delamore, Dallas County; Guy U. Robinson, Desha County; Curtis B. Clark, Grant County; Larry Lawson, A. J. Baker and Asa Crow of Greene-Clay County; Jim McKenzie, Hempstead County; V. Bryan Perry, Jefferson County; J. B. Elders, Lawrence County; E. C. Fields, Lee County; Gerald Teasley and Donald Duncan, Miller County; Norman Saliba and M. J. Osborne, Mississippi County; J. B. Jameson and L. E. Drewrey, Ouachita County; Gene Ring and D. S. Bachman, Pope-Yell County; Frank Padberg, Pulaski County; Carl Williams, Sebastian County; Wayne G. Pullen, Mike Buffington, and Mr. Walter E. Cox, Sevier County; E. Morgan Collins, St. Francis County; Ernest Hartman and George Burton, Union County; Arlis Loe, White County.

Others present were: George K. Mitchell, Edgar Easley, W. W. Workman, Charles W. Silverblatt, Mr. Warren, Mr. Schaefer, Mr. Rainwater and Miss Richmond.

The Council transacted business as follows:

1. The Council received for information the following two reports:
 - (A) A decision by the CNA Insurance Company that it was not advisable to attempt to implement in Arkansas at this time the AMA-sponsored malpractice group plan.
 - (B) Notification that the A. H. Robins Company has contributed \$200 to the Society for use by the Society in furthering such professional or educational programs as it deems most beneficial to the membership.

2. The Council heard representatives of the Greene-Clay County Medical Society discuss that society's resolution proposing that physicians be required to complete two years of family practice before becoming eligible for specialty training. The Council had received the resolution for information at the February meeting and no further action was taken at this time. Chairman Long pointed out that the resolution would be considered by a reference committee of the House during the Annual Session of the Society and that AMA delegates would support action of House regarding the resolution.
3. Upon motion of Winston Shorey, the Council voted to authorize payment of expenses by the Society for an Eye Section speaker at the 1972 convention who will not be appearing on the general session program.
4. John Crenshaw of Pine Bluff was nominated by Irwin as the successor to Dr. Lazenby as the fourth councilor district member of the Hospital - Insurance - Physician Committee. The Council voted to appoint him to the position.
5. The Council considered two legislative proposals by the State Board of Health which will be presented to the 1973 Legislature:
 - (A) Proposal #1 recommends authorization and appropriation for a minimum salary of \$35,000 and a maximum salary of \$40,000 per annum for the Director of the Arkansas Department of Health. Upon motion of Henry, the Council voted to approve the proposal.
 - (B) Proposal #2 concerns salaries of local health department personnel (city-county) and recommends that the General Assembly appropriate one million five hundred thousand dollars in the Department of Health's budget to provide salaries for all state and local public health employees within the State. Upon the motion of Irwin, the Council voted to approve the proposal.
6. The Council, by motion of Irwin, approved a membership for a staff member in the American Society of Association Executives.
7. The Council approved, upon motion of Edwards, the annual report of audit of the Society records for the period ending December 31, 1971.

8. Wayne Workman of Blytheville discussed problems which physicians of his area were having with an insurance company's handling of claims for a group plan. The insurance company is making payments to physicians on a "usual, customary and reasonable" basis without data from physicians on their usual fees. Upon motion of Fairley, the Council voted to authorize Mr. Warren to pursue this matter in court if the occasion arises. Authorization includes payment of court costs of \$200 to \$300.
9. The chairman of the Professional Services Review Organization reported on his group's study of the regional fee concept for payment of physicians' claims by Arkansas Blue Cross-Blue Shield. He reported that the PSRO had, on March 22nd, voted on the matter with the result being 8 in favor of retaining the five regions, 7 against retaining multiple regions, and 2 abstaining. Majority and Minority reports from the PSRO were presented. The Medical Director of Arkansas Blue Cross-Blue Shield, George Mitchell, reviewed the history and method of determining "prevailing ranges" for payment of claims on the usual, customary, and reasonable basis. After considerable discussion by Council members and representatives of county societies, the Council voted to refer the report of the PSRO, along with the Majority and Minority Reports, to the House of Delegates. Motion was by Orr.
10. The Council voted an expression of thanks to Dr. Wilkins and Dr. Mitchell for the work they had done and their excellent presentation on the concept of the usual, customary and reasonable fees.
11. Upon motion of Bell, the Council voted to grant permission to Mr. Warren to use the Arkansas Medical Society name as the plaintiff in an injunction suit in cases involving infringement on the practice of medicine.
12. At a January meeting of the Council, it was voted to defer action on a proposal by Union County that the Society membership be polled for fee profiles so that there could be published a schedule showing the disparity of fee recognition within the State. Chairman Long reported that some study had been made into the cost of preparing such a fee schedule and it was felt that it would

be too expensive an undertaking. Upon motion of Edwards, the Council voted to take no further action on the matter.

APPROVED: C. C. Long, M.D.

Chairman of the Council

* * *

SUPPLEMENT TO COUNCIL MINUTES

Report From: Professional Services Review Organization, Charles F. Wilkins, Jr., Chairman
 On: Regionalization of Fees under Medicare and Blue Cross-Blue Shield UCR Program

As a result of protest from the Sevier and Boone County Medical Societies, the Professional Services Review Organization was asked by the Council of the Arkansas Medical Society to study the fee structure of Medicare and the effect of regionalization of fees.

A presentation was made to the Council on March 26, 1972, at a meeting in the Sheraton Hotel in Little Rock, Arkansas, at which time each county medical society was invited to have two representatives present. The Council voted to refer the problem to the House of Delegates of the Arkansas Medical Society.

To better understand the problem, it is felt that certain background information should be presented:

With the advent of Medicare, the Arkansas Medical Society asked HEW to name Blue Cross-Blue Shield as the intermediary for the program for Arkansas. This was done. To assist Blue Cross-Blue Shield in determining usual, customary, and reasonable fees which were to be paid under the Medicare program, a "Fee Committee" was authorized and appointed. (Subsequently, the House of Delegates of the Arkansas Medical Society authorized the retention of this committee as the "21 Man Committee" to advise the Medical Director of Blue Cross-Blue Shield. This committee of twenty-one specialists and family practitioners, plus the Chairman and the Executive Committee of the Arkansas Medical Society, has since been renamed the Professional Services Review Organization which serves as the peer review body of the Arkansas Medical Society for Medicare, CHAMPUS, and Blue Cross-Blue Shield UCR programs.) As an initial step, a questionnaire was sent to all practicing physicians in Arkansas asking for their usual fee in all procedures they undertook. Approximately two-thirds of the physicians responded. These data furnished a base for a statistical study and initial

determination of UCR fees. Subsequent updating has taken place on the basis of historical data (physicians' charges actually submitted). HEW regulations required that these fees be determined by regions, but gave no method for setting up regions. The basis of such regionalization *was not* the fee level. Initially, such regionalization was on a county basis. It soon became obvious that this was not workable; therefore, in 1968 the intermediary divided Arkansas into five regions on the basis of counties with the criteria being urban population, number of physicians, ratio of specialists to family physicians, and per capita income of the county. Subsequently, Blue Cross-Blue Shield utilized the same regionalization except for the fact that four rather than five regions were indicated.

From the outset, it was apparent that allowable fees were higher in metropolitan than in smaller cities. Let us face it, the fee for a house call, an appendectomy, a consultation, etc., is, and I suspect always has been, higher in Little Rock than in Russellville. Although this was apparently acceptable when the fee was a matter between the physician and patient, such differential rankled when a third party paid, especially a governmental program. This, coupled with increasing difficulty in attracting physicians to small towns, has led to the demand on the part of some doctors and county societies that the regional differentials be abolished and all services be considered on a state-wide basis with Arkansas considered a single locality. An extensive study by the PSRO indicates that, in general, consideration of Arkansas as a single locality would result in the reduction of some prevailing fees in Area I and the elevation of some prevailing fees in Area V with spotty changes elsewhere.

It should be made very clear that Blue Cross-Blue Shield, the PSRO, the Council and House of Delegates of the Arkansas Medical Society are not empowered to raise anyone's fee. The Phase II Program regulations prevent this except under certain very limited circumstances. No fee raise has been possible since November of 1971. It is possible that the "allowable fee" under Medicare may be elevated to include fees already in effect.

We would further like to make clear that Blue Cross-Blue Shield operates within rather narrow guidelines and regulations in administering the Medicare program. If the House of Delegates of the Arkansas Medical Society indicates that it

desires that Arkansas be made a single locality, this still must be approved by HEW.

At its meeting of March 22nd, the Professional Services Review Organization was unable to make a firm recommendation to the Council. At that time, by a vote of eight to seven, with two abstaining, the PSRO voted against the motion to recommend that Arkansas be made a single locality rather than the present five regions under Medicare and four under Blue Cross-Blue Shield UCR. The Chairman of the PSRO asked for a majority and minority opinion to be presented. These are attached, and at the direction of the Council of the Arkansas Medical Society are presented to the House of Delegates for further action.

Date: March 22, 1972

Subject: Majority Report, Professional Services Review Organization (Against Changing Arkansas to One Region Under Medicare)

By: James L. Smith, M.D., Little Rock

Historically in 1967 the Arkansas Medical Society asked for a customary charge program and a confidential register of charges was mailed to each physician in the State. Sufficient number of these registers was not returned until July 1968. (Be reminded that these fees listed in the register were the usual and customary charges currently being used by the physician.)

At this time, there were 75 areas being considered in the State with each county separate. These areas were combined on a basis of shared characteristics into the five groupings now in use. Physician charges *were not* used as a basis for determination of these areas.

With the figures available from the registers returned and the figures taken from charges made of physicians who did not return the register, a guideline of payments was established by which the Government permitted payment to the 83rd percentile. This later was adjusted to the 75th percentile. Extremes of both highs and lows were excluded. Again, these figures were derived by the charges submitted in the register and also by the charges being made to the patient in each of the five areas independently.

At this time, if a physician elected to change his fees or charges then he had only to notify the carrier and wait for a 90-day lapse before these changes could be recognized and the payment adjusted. This procedure was applicable

to the CHAMPUS program and to the Blue Shield UCR program. However, the Title XVIII program required that a change in charges be in effect for one year before a change in payment could be adjusted. This update usually takes place in July each year.

But now, with the price freeze in effect, a physician, by law, cannot raise his charges. The regulations which apply to Phase II will probably extend to April 1972 and are so worded that justification to the IRS for an increase in fees is almost impossible.

With these thoughts in mind, what would be the effect of taking the State as one whole area instead of the five areas now being considered?

This procedure of taking the State as a whole would average the charges but, in general, would not average the payments.

This means that a physician in one of the lower payment areas would have his allowable payment raised on his Title XVIII patients only if he had been charging more than the allowable payment for one year or more. If he has not been charging more than the allowable payment, then he cannot raise his charge because of the price freeze.

Without going into further detail, a summary of the opinion is:

1. The figures in use in each of the five areas are determined by the charges of the physicians in each of these areas.
2. To consider the State as a whole would average these charges and penalize the physician in the higher payment areas and possibly might not help the physician in the lower payment area.
3. By law, fees cannot be raised for approximately one year.
4. If fees are raised following the price freeze, then it will be another year before payments can be adjusted.
5. The same increase in fees can be made at this time without changing the five areas in the State.

Date: March 22, 1972

Subject: Minority Report, Professional Services Review Organization (Changing Arkansas to One Region Under Medicare)

By: Rhys A. Williams, M.D., Harrison

This report is being submitted at the direction of the PSRO Committee. Specifically, this report

is limited to the action taken on Item X on the agenda of the March 22nd meeting.

Item X was a discussion of the advisability of the need for a "one locality" concept for Medicare reimbursement in the State of Arkansas. Discussion was lively and lengthy. The question was called with the result of:

In favor of a one locality concept: 7

Against a one locality concept: 8

Prior to the balloting, it was affirmed that the specialties of anesthesiology, pathology and radiology have been compensated on the basis on one locality since the inception of the Medicare program. Physicians representing two of these specialties voted against recommending allowing the remainder of the State physicians to be compensated in like manner.

Physicians voting against a "one locality" concept were practicing in Zones I or II. The minority did, however, include two physicians from Zone I.

The minority is of the opinion that the present demographic division or perhaps affluence scale of division is discriminatory to primarily the patient and, secondarily, to the physicians of rural Arkansas.

The minority recommends that the Council endorse a one locality concept for the State of Arkansas.

There are two questions paramount to this issue. The first is the fact that the patient recipient of Medicare is receiving discriminatory treatment because of our present zonal concept. The inequities of this zonal system serve to primarily discourage the development of medicine in rural Arkansas. It would be tragic if, as physicians, we let selfishness dictate the right and wrong of this issue. Certainly, each and every physician should be allowed to charge his own fee when no third party is involved in compensation. However, when a third party, particularly a governmental program, is involved, the physicians as well as the taxpayer recipient should be compensated in the same nondiscriminatory fashion.

This physician has been advised that should we of the Arkansas Medical Society not endorse this premise, that it will become a matter of debate at our next State Legislative Session.



PERSONAL AND NEWS ITEMS

Dr. Rosenzweig Elected

Dr. Joseph Rosenzweig of Hot Springs was elected Chairman of the State Board of Mental Retardation-Development Disabilities Services at a meeting in Little Rock in March. Dr. Rosenzweig has been a member of the Board since 1969.

Physicians Complete Course

Dr. Albert Baltz and Dr. Thomas DeClerk of Pocaliontas recently completed a Family Practice Refresher Course which was sponsored by the Division of Family and Community Medicine at the University of Arkansas School of Medicine in Little Rock. The four-day course, held February 26th and 27th and March 11th and 12th, included thirty-two hours of lectures and other training programs and covered all aspects of family medicine.

Dr. Baltz also attended an all day seminar in the Department of Pediatrics on new born baby care.

Dr. Dodge Guest Speaker

Dr. Eva F. Dodge, director of the State Health Department's Family Planning Project of Eastern Arkansas, was the speaker at an area conference for public health nurses which was held in the Arkansas County Health Department in DeWitt. Arkansas County is one of seven counties participating in the Family Planning Project.

Physicians Attend Meeting

Dr. and Mrs. C. Lynn Harris of Hope, Dr. William S. Orr of Little Rock, and Dr. Kemal Kutait of Fort Smith, attended the American Medical Association Political Action Committee's Public Affairs Workshop, held March 11th and 12th in Washington, D.C. Dr. Orr is chairman of the Arkansas Political Action Committee, and Mrs. Harris is a member of the Board.

Little Rock Physician Appointed

Dr. Raymond P. Miller of Little Rock has been appointed to a ten-year term on the University of Arkansas Board of Trustees.

Dr. Shorey Speaks to Club

Dr. Winston K. Shorey, Dean of the University of Arkansas School of Medicine, addressed the

March meeting of the Lions Club of Dumas. Dr. Shorey discussed the medical problems which smaller communities are faced with today.

Jonesboro Physicians Receive Training

Dr. James Robinette, Dr. W. F. Shepherd, Dr. Gus Craig, Dr. G. Wayne Taylor, and Dr. Richard Burns have received hemodialysis training at the Veterans Administration Hospital in Little Rock, in preparation for St. Bernards Hospital in Jonesboro becoming involved in a State-wide network of kidney disease treatment centers.

Physician and Clinic Announce New Associates

Dr. James M. Kolb, Jr., announces the association of Dr. Ted Honghiran in his practice of orthopedic surgery in Clarksville and Russellville.

Millard-Henry Clinic in Russellville announces the association of Dr. William M. Williams as a gynecologist and obstetrician at the Clinic.

Dr. Kilbury Named Chairman

Dr. M. J. Kilbury, Jr., of Little Rock, was named chairman of the Arkansas Regional Medical Program's Regional Advisory Group at a two-day meeting held in Hot Springs in March.

Physicians Named Fellows

Dr. Harold D. Langston of Little Rock and Dr. Paul L. Rogers of Fort Smith were named Fellows of the American College of Radiology during the College's 49th annual meeting in Miami Beach, Florida, April 3rd through April 8th.

Physicians to Form Professional Association

Drs. A. R. Brown, Thomas A. Formby, Jack R. Gardner, David M. Johnson, Arlis Loe, Benjamin Lowery, H. C. Palmer, Jr., and William D. White have announced plans to form a professional association to be known as the Searcy Medical Center, Professional Association. A new building, to be located at the site of the present Medical Arts Center, will have accommodations for twelve doctors, complete with X-ray and laboratory facilities. The new building will be ready for occupancy in approximately one year.

Dr. DePalma Honored

Dr. Anthony T. DePalma of Fayetteville attended the Fifth Annual Symposium of Military

Plastic Surgeons, held January 24th-26th at Walter Reed Army Medical Center in Washington, D. C.

On February 2nd, Dr. DePalma was presented with the Armed Forces Reserve Medal for ten years of continuous service in the Army Reserve.

Foreman Clinic Opens

The Foreman Medical Clinic opened in April, and will be served by physicians from the DeQueen Clinic, Ltd., in DeQueen. Dr. Charles N.

Jones, Dr. Wayne G. Pullen, Dr. Frank Daniel, Dr. Eugene A. Joseph, Dr. Jim C. City, and Dr. Michael Buffington will alternate in serving at the Foreman Clinic for one-half day, four days each week.

Dr. Smiley Named Director

Dr. George W. Smiley of Booneville has been named Medical Director of the Arkansas Tuberculosis Sanatorium. Dr. Smiley has been associated with the Sanatorium since 1963.

THINGS



TO COME

Children's Medical Camp

A Children's Medical Camp will be conducted July 3-8, 1972 at Camp Aldersgate in Little Rock. The purpose of the camp is to provide camping experience for children from nine to sixteen years of age who have medical problems or handicaps. Applications from children with no specific medical problems are also accepted. Questions regarding a child's eligibility should be directed to Mr. Ray Tribble, Camp Director. Campership charge is \$30.00 for the week. A limited number of scholarships are available. The number of children who can be accepted is limited and applications are accepted on a first-come, first-served basis. Applications for scholarships and registration forms may be obtained by writing the camp office, 2000 Aldersgate Road, Little Rock 72205, or telephone 225-1444. The Children's Medical Camp is recommended and endorsed by the Central Arkansas Pediatric Society and the Arkansas Chapter of the American Academy of Pediatrics.

Diabetic Camping Session

A two-week camping session for children with Diabetes Mellitus will be held July 16-29, 1972 at the Young Men's Christian Association's Camp Singing Waters, located at Holden, Louisiana. The camping session is sponsored by the Greater New Orleans Diabetes Association. For more information write: Diabetic Summer Camp, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

Medicine-Religion Symposium

A Statewide meeting of physicians and ministers is scheduled for October 28th at the University of Arkansas Medical Center. The meeting is open to all physicians and ministers and their students. Dr. Milford O. Rouse of Dallas, Texas, and Dr. Richard C. Halverson of Washington, D. C., will be the keynote speakers. The meeting is being planned by the Arkansas Medical Society's Committee on Medicine and Religion, and is co-sponsored by the University of Arkansas Medical Center, St. Vincent Infirmary, Arkansas Academy of Family Practice, Baptist Medical Center, Arkansas State Hospital and Consolidated Veterans Administration Hospital, Little Rock.

Conference on Urologic Cancer

The First National Conference on Urologic Cancer, sponsored by the American Cancer Society, will be held March 29-31, 1973, at the Shoreham Hotel in Washington, D. C. For information write: Sidney L. Arje, M.D., First National Conference on Urologic Cancer, c/o American Cancer Society, 219 East 42nd Street, New York, New York 10017.

ANSWER — Electrocardiogram of the Month

This electrocardiogram is an excellent example of intermittent Wolff-Parkinson-White syndrome. Note particularly in Lead II and III, the varying P-R interval which when most markedly shortened is associated with a slurred "Delta wave" initial QRS complex. Note also the ST-T wave changes which also change as the intraventricular conduction changes. These ST-T wave changes are probably secondary to the pre-excitation of the ventricle. Evaluation of ST-T wave changes, however, in the light of pre-excitation syndrome is fraught with hazard.

The patient also is demonstrating a mild sinus tachycardia with a heart rate of approximately 110 to 120. In all probability this is a true sinus tachycardia rather than a paroxysmal supraventricular tachycardia attributable to circus re-entry. Circus re-entry tachycardia in the W-P-W syndrome usually are of a slightly faster rate (140 to 180) and do not show as great a variability in R-R interval as can be seen in these tracings (Note particularly Lead V₅).



NEW MEMBERS

Dr. Douglas C. Ronald

Dr. Douglas C. Ronald, a native of Clear Lake, South Dakota, has been accepted for membership in the Benton County Medical Society.

In 1944, he was graduated from Doane College, Crete, Nebraska, and in 1950 he was graduated from the University of Nebraska College of Medicine. Dr. Ronald completed his internship at the Kansas City General Hospital, Kansas City, Missouri. From 1941 to 1946 he served in the United States Navy. Dr. Ronald practiced in Butler, Missouri, for twenty years before moving to Bella Vista, Arkansas, where he has been in the general practice of medicine at the Concordia Medical Center since the early part of this year.

Dr. Floyd R. Shrader

The Crittenden County Medical Society has announced that Dr. Floyd R. Shrader is a new member of that Society. He was born in Duncan, Oklahoma.

Dr. Shrader was graduated from Central State College in Edmond, Oklahoma, in 1965, and was graduated from the University of Oklahoma School of Medicine in 1969. His internship was completed at the City of Memphis Hospitals, Memphis, Tennessee, and he also received his residency training in Internal Medicine there.

Dr. Shrader is in the general practice of medicine at 200 South Rhodes in West Memphis.

Dr. Ronald D. Smith

Dr. Ronald D. Smith is a new member of the Mississippi County Medical Society. He was born in Searcy, Arkansas. He attended Harding College and was graduated from the University of Arkansas in 1965. Dr. Smith's internship was served at St. Vincent Infirmary in Little Rock.

Dr. Smith is associated with the Rainwater-Workman Clinic in Blytheville, where he is in the general practice of medicine.

Dr. L. J. Bull

Dr. L. J. Bull has been added to the membership roll of the Pope-Yell County Medical Society. Dr. Bull is a native of Aplin, Arkansas.

His pre-medical education was received at Madison College, Madison, Tennessee, and the George Peabody College in Nashville, Tennessee — graduating from the latter in 1949. Dr. Bull was a 1953 graduate of the University of Arkansas School of Medicine. His internship was completed at the Arkansas Baptist Medical Center. Dr. Bull was in practice for sixteen years in Tempe, Arizona, before moving to Plainview a year and a half ago. He is a family practitioner.

Dr. William Allen Coger

Dr. William A. Coger is a new member of the Pope-Yell County Medical Society. He was born in Russellville, Arkansas.

Dr. Coger attended Arkansas Polytechnic College in Russellville, and was graduated from the University of Arkansas School of Medicine in 1970. He completed his internship at the United States Naval Hospital, Camp Pendleton, California. Dr. Coger's office for the general practice of medicine is located in the Dan-Ark Village in Danville.

Dr. G. Howard Kimball

Dr. G. Howard Kimball, a native of DeQueen, Arkansas, is also a new member of the Pope-Yell County Medical Society.

Dr. Kimball is a graduate of Hendrix College, Conway, Arkansas, and the University of Tennessee College of Medicine, Memphis, Tennessee. His internship was completed at the City of Memphis Hospitals. Dr. Kimball did his residency work in General Surgery at the Veterans Administration Teaching Group Hospital from 1959 to 1964. Following the completion of his residency, Dr. Kimball attended Columbia Bible College, Columbia, South Carolina, and worked as a medical missionary to Arabia under the World Presbyterian Missions from September 1965 to July 1968. He is now associated with the Millard-Henry Clinic in Russellville, where he specializes in general surgery.

Dr. William Edward Atkinson, Jr.

Dr. William E. Atkinson, Jr., has been accepted for membership in the Pulaski County Medical Society. He was born in Fordyce, Arkansas.

In 1962 he was graduated from Arkansas A.

and M., College Heights, Arkansas, and in 1967 he was graduated from the University of Arkansas School of Medicine. His internship was served at the University Medical Center, and he also completed a residency in Pathology there in 1971. Dr. Atkinson holds a teaching appointment at the University of Arkansas School of Medicine, Pathology Department. Since July 1971 he has been associated with St. Vincent Infirmary as a pathologist.

Dr. Charles M. Boyd

Dr. Charles M. Boyd, a native of Pecos, Texas, is a new member of the Pulaski County Medical Society.

Dr. Boyd was graduated from the University of Texas at El Paso, El Paso, Texas, in 1956 and from Tulane University School of Medicine, New Orleans, Louisiana, in 1960. His internship was completed at Walter Reed General Hospital, Washington, D. C. Dr. Boyd's three-year residency in Internal Medicine was done at William Beaumont General Hospital in El Paso. He is presently assistant professor of Radiology (Nuclear Medicine) at the University of Arkansas School of Medicine.

Dr. Donald Benjamin Kettelkamp

Dr. Donald B. Kettelkamp is also a new member of the Pulaski County Medical Society. He was born in Onamosa, Iowa.

Dr. Kettelkamp is a 1951 graduate of Cornell College, Mt. Vernon, Iowa, and a 1955 graduate of the University of Iowa College of Medicine, Iowa City, Iowa. He interned at Thomas D. Dee Memorial Hospital in Ogden, Utah. He then returned to the University of Iowa College of Medicine where he completed a three-year residency in Orthopaedic Surgery. Since August 1971 Dr. Kettelkamp has been Professor and Chairman of Orthopaedic Surgery at the University of Arkansas Medical Center.

Dr. Frank P. Cantrell

Dr. Frank P. Cantrell, a native of Cape Girardeau, Missouri, has been accepted for membership in the Saline County Medical Society.

Dr. Cantrell attended Little Rock Junior College, and was graduated from the University of Arkansas School of Medicine in 1950. His intern-

ship was served at St. Louis City Hospital, St. Louis, Missouri. He completed two years of residency work in Internal Medicine at the Kennedy Veterans Administration Hospital, Memphis, Tennessee, and one year of training in the same specialty at the Veterans Administration Hospital, Atlanta, Georgia. Dr. Cantrell served as an instructor in Internal Medicine at the Emory University School of Medicine, Atlanta, Georgia, from 1955 to 1956.

He is Board Certified in Internal Medicine. Dr. Cantrell is associated with the Benton State Hospital, where he specializes in Internal Medicine.

Dr. Patricia Helen Rountree

Dr. Helen Rountree is a new member of the Saline County Medical Society. A native of Morrilton, Arkansas, Dr. Rountree received her B.A. degree from Hendrix College in Conway in 1958, and her M.D. degree from the University of Arkansas School of Medicine in 1967. Her internship in straight pediatrics was at the University Medical Center, as well as her residency work in Pediatrics, and a two year Fellowship in Pediatric Allergy and Immunology. Dr. Rountree has served as instructor of Pediatrics and as Assistant Professor of Pediatrics at the University of Arkansas Medical Center. Her office for the practice of Pediatrics and Pediatric Allergy is at 825 North Main in Benton.

Dr. Robert E. Stutsman

Dr. Robert E. Stutsman is a new member of the Saline County Medical Society.

Dr. Stutsman attended William Penn College, Washington Junior College, the University of Iowa, and was graduated from the University of Arkansas School of Medicine in 1940. His internship was completed at Deaconess Hospital, Cincinnati, Ohio, and he received his residency training in Psychiatry at the Arkansas State Hospital in Little Rock. Dr. Stutsman served in the United States Navy from 1942 to 1963, retiring as Captain in the Medical Corps. Over the past thirty years, he has practiced in Arkansas, Arizona, Iowa, and New Mexico. While in Iowa, Dr. Stutsman served as Medical Director of the Carinda Mental Health Clinic in Des Moines. He is now associated with the State Hospital, Benton Unit, where he specializes in psychiatry.



PROCEEDINGS OF SOCIETIES

The Washington County Medical Society and the Woman's Auxiliary to the Washington County Medical Society presented a check to the Ozark Guidance Center for the purchase of a copying machine. The Center was established with the aid of a federal grant and serves residents of Benton, Carroll, Madison and Washington Counties.

Activities offered by the Center include individual and group counseling, psychological testing, and in-service training sessions for staffs of other agencies and school counselors. It also provides after-care services for patients released by the State Mental Hospital, including follow-up and family counseling.



Woman's
Auxiliary

Doctor's Day Observed

The Boone County Medical Society Auxiliary entertained their husbands with a buffet dinner at the home of Dr. and Mrs. Joe D. Bennett. Auxiliary members served as hostesses.

The Hempstead County Medical Society Auxiliary honored their husbands by making a contribution to the American Medical Education and Research Foundation.

The Sebastian County Medical Society Auxiliary honored their husbands on April 8th in observance of Doctor's Day, with a dinner at the Old Town Club in Fort Smith. A musical skit was presented by the Auxiliary, with Dr. L. A. Whittaker serving as Master of Ceremonies. Spe-

cial recognition was given to two physicians who are also physicians' wives, Dr. Annette Landrum and Dr. Louise Henry. Mrs. L. A. Whittaker was chairman of Doctor's Day. Mrs. Gerald Patton, president of the Auxiliary, welcomed the physicians and their wives.



OBITUARY

Dr. Talmadge Keller Lieblong

Dr. Talmadge Keller Lieblong of Conway died March 15th, at the age of fifty-eight.

A native of Greenbrier, Arkansas, Dr. Lieblong was graduated from the University of Arkansas School of Medicine in 1944. He served two years in the Army Air Force during World War II before establishing his practice in Conway in 1947.

Dr. Lieblong was a member of the First United Methodist Church. He was a member of the Faulkner County Medical Society, the Arkansas Medical Society, and the American Medical Society.

He was serving as president of the Conway School District's Board of Education at the time of his death.

Dr. Lieblong is survived by his wife, Mrs. Violet Alexander Lieblong, two sons, one daughter, one grandchild, his mother, a brother and a sister.

Dr. Keller Lieblong

We mark with regret the loss of one of our beloved colleagues, Dr. Keller Lieblong, whose demise occurred Wednesday, March 15, 1972.

His exemplary devotion to duty, and his sincere concern for his patients and their well-being has been an inspiration to all who had the privilege of working with him these past years.

The medical community as well as his multitude of patients has sustained a deep loss.

We pray that our community and our profession can be blessed by more men of his caliber.

Faulkner County Medical Society
Fred Gordy, Jr., M.D., President

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